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Promoting learner flourishing and well-being beyond the classroom: The role of advising in language learning from a self-determination theory perspective

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ABSTRACT

This study adopts a Self-Determination Theory (SDT; Ryan, 2023) perspective to investigate how Advising in Language Learning (Kato & Mynard, 2016) and the role of the learning advisor contribute to satisfying language learners' basic psychological needs and foster an autonomysupportive learning climate. These needs are conceptualised as learners perceiving personal ownership (autonomy), progressive mastery (competence), acceptance and emotional connection (relatedness) within the advising sessions, leading to positive outcomes in their learning processes and well-being. SDT contends that learning environments and social supports that facilitate need satisfaction activate learners' autonomous motivation, foster well-being and flourishing, and contribute to adaptative functioning. Building on previous research (Shelton-Strong & Tassinari, 2022) this study seeks to provide novel insights into how learners' basic psychological needs are satisfied and identify associated benefits of experiencing need satisfaction resulting from the Advising process. While much of SDT research in education has focussed on the teacher's role in enabling or hindering need-supportive conditions, the distinct role of the learning advisor remains underrepresented in the literature. To address this gap, this study explores the extent to which the participants experienced perceived autonomy, competence, and relatedness within the Advising relationship, and identifies ways this support facilitated a learning climate conducive to basic psychological need satisfaction. The findings indicate that learning advisors play a pivotal role in providing an important need-supportive experience, leading to positive outcomes including personal growth, the development of effective coping strategies, experiencing hope, meaning, and agentic engagement within the learning process.

1. Introduction

Contemporary educational goals are increasingly shaped by a focus on learner well-being and lifelong flourishing, challenging the traditional view of education as primarily a means of cultivating human capital. This perspective aligns with a growing body of literature advocating for a flourishing-focused reorientation, with significant implications for learners' motivation, healthy development, and well-being (Curren et al., 2024; Duraiappah, Van Atteveldt, & Buil, 2022; Martela, 2024; Reeve, Ryan, Cheon, Matos, & Kaplan, 2022; Ryan, Reeve, Kaplan, Matos, & Cheon, 2023). Within the field of language education, this shift is evident in research on

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learner and teacher well-being (Davis, 2022; Gregersen & Mercer, 2022; Mercer & Gregersen, 2023), yet less attention has been paid to how learner flourishing and well-being can be supported *outside* formal classroom settings.

To bridge this gap, the present study takes a Self-Determination Theory perspective (SDT; Ryan & Deci, 2017; Ryan, 2023) to examine how learner engagement in Advising in Language Learning and the quality of the learner-advisor relationship fosters satisfaction of learners' basic psychological needs of autonomy, competence, and relatedness, predictive of learner flourishing and well-being. Against this background, Advising in Language Learning (Advising, henceforth) is posited as a practice supportive of these needs, defined as a "process of dialogical interventions" (Mozzon-McPherson, 2019, p. 96) aimed at "promoting deeper-level reflective thought processes in order to promote an awareness and control of learning" (Mynard, 2021, p. 46). From an SDT perspective, the advising dialogue and learner-advisor relationship function as a form of social scaffolding (potentially) facilitating an autonomy-supportive learning climate and support for learners' basic psychological needs (Shelton-Strong, 2022).

Decades of empirical evidence have supported the assumption that basic psychological needs exist and play an essential role in motivation, well-being, and optimal functioning (Vansteenkiste, Soenens, & Ryan, 2023). While numerous studies have explored how teachers can facilitate need-supportive conditions in classrooms (Reeve et al., 2022), research affirms that learning and supportive relationships extend beyond these formal settings (Mynard & Shelton-Strong, 2022a), underscoring the importance of investigating need-supportive conditions beyond traditional classroom settings. The practice of Advising, which operates in this extended learning space (beyond the classroom), draws on various domains in which SDT and basic psychological needs have been a focus of both research and practical intervention. These include coaching (Delrue et al., 2019; Ryan & Deci, 2019b), parenting (Vrijders et al., 2024; Laporte, Soenens, Brenning, & Vansteenkiste, 2021), behaviour change (Teixeira et al., 2020), as well as general education (Herrera, Matos, Gargurevich, Lira, & Valenzuela, 2021; Reeve, 2009, 2016; Ryan et al., 2023; Sung et al., 2024), and language (learning) education (Dincer, Yeşilyurt, Noels, & Vargas Lascano, 2019; Mynard & Shelton-Strong, 2022b; Noels et al., 2019a; Noels, Adrian-Taylor, Saumure, & Katz, 2019b; Noels, 2023; Davis, 2022; Davis & Printer, 2022; Oga-Baldwin, Nakata, Parker, & Ryan, 2017).

Substantial research confirms that support for basic psychological needs promotes autonomous motivation, well-being, and optimal functioning, whereas need thwarting, frustration, or neglect undermine these, leading to passivity, ill-being, and poor functioning (Dalgas, Ntoumanis, Elmose-Østerlund, & Bredahl, 2024; Ntoumanis, 2023; Reeve et al., 2023; Ryan, Lynch, Vansteenkiste, & Deci, 2011; Vansteenkiste & Ryan, 2013). Given the benefits of supporting students' autonomy, competence and relatedness in learning and language education, understanding how they experience their learning environment and ensuring an effective need-supportive learning climate is provided is essential (Davis, 2022; Jang, Kim, & Reeve, 2012; Noels, 2023; Reeve, 2016, 2022b; Reeve et al., 2022; Ryan & Deci, 2020; Ryan et al., 2023; Vansteenkiste, Aelterman, Haerens, & Soenens, 2019).

The rationale for this study lies within SDT's organismic underpinnings, which posit that our innate, growth-oriented nature depends on contextual supports to activate flourishing (Ryan & Vansteenkiste, 2023). Within educational contexts, significant others—such as teachers or advisors—play an important role in fostering these conditions through interpersonal behaviours that support autonomy, competence, and relatedness (Slemp et al., 2024). However, despite substantial research on need-supportive teaching (Ahmadi et al., 2023; Reeve et al., 2022), the precise mechanisms through which Advising fosters need satisfaction remain underexplored.

Building on theoretical and empirical foundations of Advising from an SDT perspective (Mynard & Shelton-Strong, 2022b; Shelton-Strong, 2020, 2022; Shelton-Strong & Tassinari, 2022), this study examines how the reflective dialogue in Advising and the learner-advisor relationship promote autonomous internalisation and self-endorsement, vitalising the interplay between need satisfaction and flourishing outcomes (Ryan et al., 2023).

SDT is broad theory of motivation, personality development, and well-being, comprised of six mini-theories (Ryan & Deci, 2017) primarily concerned with "understanding why we do what we do, and what leads to flourishing versus degradation in a human life" (Ryan & Vansteenkiste, 2023, p. 3). Basic Psychological Needs Theory (Ryan, 1995; Vansteenkiste et al., 2023) provides SDT's perspective on well-being and plays a key explanatory role in the understanding of human functioning, identifying autonomy, competence, and relatedness as universal basic psychological needs. Extensive cross-cultural research has demonstrated how satisfaction of these needs is crucial for sustainable well-being and flourishing (Howard, Slemp, & Wang, 2024; Ryan & Deci, 2000; Slemp et al., 2024).

In SDT, autonomy is the need to experience one's thoughts and actions as self-governed, volitionally regulated, and congruent with one's personal values and sense of self (Curren et al., 2024). Competence involves seeking optimal challenges and experiencing progress in mastering them (Reeve et al., 2022). Relatedness refers to experiencing social connection, caring relationships, and belonging (Oga-Baldwin, 2022; Knee & Browne, 2023) and is closely interconnected with autonomy, contributing significantly to learner flourishing. These needs are considered universal, although their expression may vary culturally underpinning the principle of "universality without uniformity" (Vansteenkiste et al., 2023, p. 98). Importantly, the extent to which the environment supports basic need satisfaction is critical for internalisation, interest development, and intrinsic motivation (Ryan, Deci, Vansteenkiste, & Soenens, 2021). This highlights the significance of how the learning environment is experienced (Davis, 2020) with clear implications for Advising contexts.

The question of whether and how learner involvement in Advising sessions facilitates well-being and flourishing is central to this study. According to Ryan et al. (2023), "the purpose of education is to promote human flourishing," defined as "the blossoming of capabilities and wellness" (p. 591). Flourishing involves engaging autonomously and mindfully with intrinsic goals and values, thereby satisfying basic psychological needs (Curren et al., 2024). SDT's conceptualisation of well-being emphasises eudaimonic rather than merely hedonic aspects, focusing on the realisation of human potential and optimal functioning (Martela & Sheldon, 2019; Ryan & Deci, 2019a; Sheldon, 2018). Central to SDT's view of flourishing and well-being is the understanding that when learning

environments foster flourishing, enhanced learning and academic achievements are also furthered. This contrasts with traditional educational approaches prioritising knowledge transmission and accountability measures that have failed to improve learner well-being or educational outcomes (Curren et al., 2024). Importantly, flourishing in SDT refers not to an end-state but rather a term to signal that growth and integrity are occurring in the life of the student (Ryan et al., 2023). This SDT-informed conceptualisation includes full and interested learner engagement, personal growth and effectiveness, and perceptions of inclusion and community support, implying an influential supportive role for significant others (Ryan et al., 2023; Martela, 2024; Noels et al., 2019b).

Extensive research indicates that access to and functioning within need-supportive environments fosters internalisation (Vansteenkiste et al., 2018), enhanced engagement (Reeve, 2022b), and increased self-regulated learning (Mouratidis, Vansteenkiste, Michou, & Lens, 2013). Such environments are considered "essential to and predicative of well-being, measured in a variety of ways" (Curren et al., 2024, p. 14). SDT posits that need satisfaction not only promotes well-being but also buffers against negative impacts of need thwarting (Vansteenkiste & Ryan, 2013). This state of thriving, or full functioning, enables learners to fully utilise their sensibilities and capabilities, maintain awareness of their emotions, and sustain volitional engagement with learning tasks (Ryan et al., 2023) underscoring the important role of Advising in fostering a need-supportive learning climate.

Advising represents a distinctive pedagogical approach that extends beyond traditional classroom instruction (Mynard, 2021). Conceptualised as a transformative dialogical process, learning advisors (facilitating the dialogue) aim to build trust and empathetic relationships creating a safe space for self-exploration. Rather than offering solutions, advisors use carefully crafted reflective questions to help learners discover their own paths to transform their learning (Kato, 2025). Unlike traditional teaching or counselling, advising is characterised by its non-directive nature and focus on promoting learner reflection, self-awareness, and agency. Through dialogue, advisors help learners explore their learning processes, identify challenges, and develop personalised strategies for improvement (Mozzon-McPherson & Tassinari, 2020).

Key to this approach is the belief that learners construct their understanding through reflection on experience, and that this process is facilitated by supportive interpersonal relationships. The dialogical nature of Advising creates opportunities for perspective-taking, effectance-related feedback, and empathic understanding (Shelton-Strong & Tassinari, 2022) aligning with SDT's emphasis on autonomy support and need satisfaction as prerequisites for optimal learning and well-being (Ryan & Deci, 2017). Reflection, in this context, is defined as "the intentional examination of experiences, thoughts and actions in order to learn about oneself and inform change or personal growth" (Mynard, 2023, p. 23). When reflection leads to awareness, this "enhances integration and volition, as individuals become more informed in the self-regulation of their behavior" (Ryan & Deci, 2019a, p. 31).

In practice, Advising is often associated with self-access learning centres (SALCs), which provide resources, spaces, and communities to support learning and language development (Murray, 2018; Mynard, 2024; Tassinari, 2016). In the context of the present study, students access learning advisors in the university's SALC (see 2.2) and engage in conversations about their learning within voluntarily arranged advising sessions and regular informal contact (Mynard, 2021; Mynard et al., 2022). Rooted in social constructivist learning theories, humanistic psychology, and reflective practice (Mynard, 2021), Advising incorporates humanistic approaches to counselling (Egan, 1998; Rogers, 1951), positive psychology and life coaching (Biswas-Diener, 2010; Rogers, 2012; Ryan & Deci, 2019b), and other aspects of learning psychology (Mercer & Ryan, 2016; Oxford, 2016). A common thread within these approaches is the focus on dialogue to enhance self-awareness and stimulate change from within.

The theoretical underpinnings of Advising draw considerably on Mezirow's Transformational Learning Theory, which posits that meaningful learning occurs through critical reflection on assumptions, beliefs, and experiences (Mezirow, 1991). Within Advising, this transformative process is facilitated through reflective dialogue, encouraging learners to examine their beliefs about language learning, identify patterns in their approaches, and consider alternative perspectives (Kato & Mynard, 2016). This process fosters "perspective transformation," a fundamental shift in how learners understand themselves and the learning process (Kato, 2025). Complementing this is a sociocultural perspective that views learning as socially mediated through psychological tools and interpersonal interaction (Lantolf, Thorne, & Poehner, 2015; Vygotsky, 1978). Language serves as the primary mediational tool in Advising sessions, where advisors use dialogical strategies to scaffold learners' reflection, problem-solving, and goal setting (Kato, 2025). This approach emphasises the importance of the advisor as a facilitator of reflection and co-constructor of dialogue, rather than an authoritative source of knowledge, (Shelton-Strong, 2020).

Advising sessions typically involve one-to-one conversations, with advisors employing dialogic strategies to promote reflection and insight based on learners' goals and experiences (Mynard & Carson, 2012; Kato & Mynard, 2016; Kato, 2025). These strategies include reflective questioning techniques to prompt deeper thinking, metaphorical language to help learners conceptualise abstract aspects of their learning experience, intentional use of silence to allow space for reflection, restating or summarising to clarify understanding and demonstrate active listening, empathising and sharing experiences to build rapport, and promoting accountability through action-oriented questions (Kato & Mynard, 2016; Kato, 2025; Kelly, 1996; Mozzon-McPherson & Tassinari, 2020). For instance, advisors may ask, "By when will you do it?" or "Will you let me know how it went?" to encourage learners to hold themselves accountable for implementing ideas discussed during advising sessions. These strategies act as mediational tools that scaffold learners' reflective processes, enabling them to gain insights into their learning, identify patterns in their approaches, and develop strategies aligned with their goals and values (Shelton-Strong & Tassinari, 2022).

When combined with autonomy-supportive behaviours such as taking the learner's perspective, providing meaningful choices and rationales, using non-pressuring language, taking an unconditional interest in the learner, empathetic and active listening, and acknowledging/accepting negative affect (Reeve & Cheon, 2021), these strategies create a nurturing environment supportive of learners' basic psychological needs. This environment enhances self-regulation and fosters personal growth as well as feelings of belonging and significance, ultimately contributing to learner flourishing (Ryan & Deci, 2019b; Shelton-Strong & Tassinari, 2022).

Transformation in Advising occurs through what Kato (2025) describes as a shift in learners' internal conversations—the ways they

think about, interpret, and respond to their learning experiences. As learners engage in reflective dialogue with advisors, they gradually internalise the questioning processes, developing enhanced metacognitive awareness and self-regulatory capacities (Shelton-Strong & Tassinari, 2022). This process aligns with SDT's concept of autonomous internalisation, where external regulations are progressively integrated into one's sense of self, leading to more autonomous forms of motivation and enhanced well-being (Vansteenkiste et al., 2018).

The learner-advisor relationship represents a unique pedagogical context distinct from traditional teacher-student dynamics. Unlike classroom instruction, which typically involves predetermined curricula, assessment requirements, and power hierarchies, learning advisors establish a more equitable, non-evaluative relationship focused on supporting the learner's self-directed development (Shelton-Strong, 2022). This relationship creates favourable conditions for need satisfaction by removing external pressures, providing non-judgemental acceptance, and establishing genuine connections (Mynard & Shelton-Strong, 2022b).

When learners experience advising as autonomy-supportive, this fosters proactive engagement that draws learners to interact with their environments in ways that render them more need-supportive and further satisfy their basic psychological needs (Reeve, 2022b). Fig. 1 illustrates this pathway from autonomy-supportive behaviours in advising sessions to positive outcomes including agentic engagement, subjective vitality, pro-social behaviour, and self-regulated flourishing.

Drawing on SDT's theoretical framework and applied processes, this research advances our understanding of Advising as a nonclassroom intervention promoting learner well-being, while providing actionable insights for aligning Advising practices with flourishing as a central educational goal. Integrating quantitative and qualitative methodologies, this study addresses the call for research on practical interventions facilitating learner flourishing beyond traditional classrooms (Davis, 2022; Noels, 2023; Ryan et al., 2023). Specifically, the quantitative component examines the relationship between learner perceptions of autonomy-supportive advising and experienced basic psychological need satisfaction, as illustrated in Fig. 2's hypothesised 2-factor model. The qualitative exploration investigates the subtle and specific ways need support and related need satisfaction are experienced.

Building on this theoretical foundation, this mixed-methods study examines how Advising in Language Learning, through the lens of SDT, fosters learner flourishing and well-being at a Japanese university.

Specifically, this research aims to:

- 1. Investigate learners' perceptions of Advising as a source of support for basic psychological need satisfaction.
- 2. Examine how learner experience in Advising sessions promotes autonomous internalisation and self-endorsement through reflective dialogue, leading to positive growth outcomes aligned with autonomy-supportive practices.
- 3. Explore the contribution of the learner-advisor relationship to the interplay between need satisfaction and flourishing outcomes,

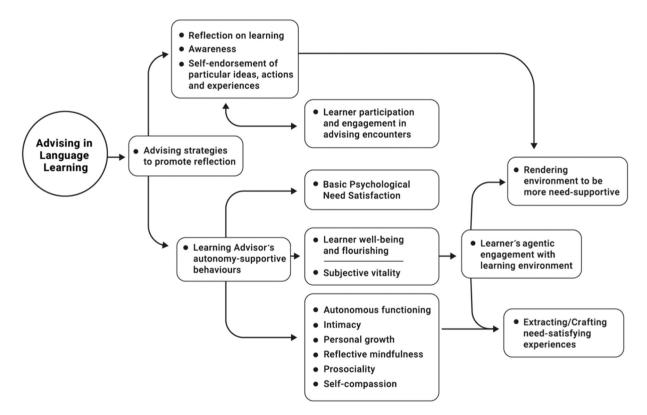


Fig. 1. A conceptualisation of advising in language learning as an autonomy-supportive practice from an SDT perspective.

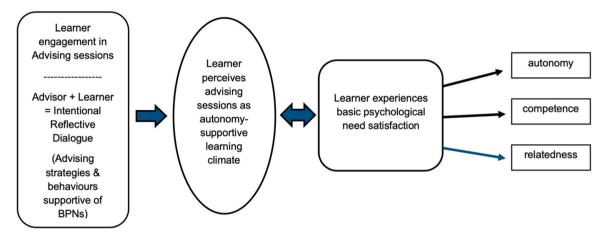


Fig. 2. Hypothesised 2 factor model.

To guide this exploration, the following hypotheses and research questions were formulated:

H1a: Learners participating in advising sessions will perceive these as autonomy-supportive, correlating positively with their experience of basic psychological need satisfaction.

H1b: Repeated advising sessions will lead to increased basic psychological need satisfaction over time.

Research Question 1: What positive outcomes do learners perceive as arising from experiencing advising sessions as need-supportive?

Research Question 2: What advisor behaviours do participants perceive as enhancing the need-supportive nature of the learner-advisor relationship?

2. Method

2.1. Research design

This study employs a mixed-methods approach, combining explanatory sequential and concurrent triangulation methods (Edmonds & Kennedy, 2017). This design allows for the convergence of overarching macro-trends from quantitative questionnaire data with detailed personal experiences from qualitative self-reports. The qualitative data was used in the subsequent interpretation and clarification of quantitative results (Creswell & Plano Clark, 2007). This approach allowed the research to extend beyond broad statistical trends to include an analysis of participants' perceptions of advising, exploring its potential to foster well-being and flourishing from an SDT perspective, which is at the heart of this study (Ryan et al., 2023).

2.2. Setting and participants

The study was conducted at a self-access learning centre (SALC) in a small Japanese university specialising in foreign language degrees and cultural studies. The SALC provides 30-minute sessions with learning advisors for continued support beyond the classroom, which students arrange at their own initiative (Mynard & Shelton-Strong, 2020). Twelve full-time learning advisors (which includes the present author), all with higher degrees and substantial experience in language teaching and advising, deliver this service (Mynard et al., 2022). As a member of the advising staff, the author has regular contact with students who visit the SALC, potentially including study participants. However, participant anonymisation mitigates any potential bias. Participants (n = 65) were undergraduate language learners who had voluntarily arranged at least one advising session during the academic year. When asked to report their most common motivations for arranging advising sessions, most frequently reported were those related to language learning (70 %), confidence or motivation (60 %), and language use (53.8 %). Less common were reasons related to exams or study abroad (both under 17 %). The study participants were predominantly Japanese nationals with the possibility of a small number of other nationalities involved (this information was not collected). Of these, 32.3 % were 1st-year students, 30.8 % were in their 2nd year, 20 % were 3rd-year students, and 16.9 % were in their final year. The sample comprised 75.4 % female, 18.5 % male, and 6.2 % undisclosed students, aged 18–24 (m = 20.2; SD = 1.34).

2.3. Measures

2.3.1. Quantitative measures

The questionnaire included two validated scales adapted for the advising context:

- Learning Climate Questionnaire (LCQ; Black & Deci, 2000): Six items on a 7-point Likert scale measured perceived autonomy support in advising sessions (α = .89). Example item: "The learning advisors I speak to try to understand how I see things before suggesting a new way to do things."
- Basic Psychological Need Satisfaction in Relationships (BPNSR; La Guardia, Ryan, Couchman, & Deci, 2000): Nine items assessed satisfaction of autonomy, competence, and relatedness within the learner-advisor relationship ($\alpha = .86$). Example item: "When I am with my learning advisor, I feel free to be who I am."

In addition to the quantitative scales, qualitative measures were employed to gain deeper insights into participants' experiences and perceptions of advising sessions.

2.3.2. Qualitative measures

- Participant Self-Reports: Open-ended responses to the prompt: "In your own words, please write a short communicate how you feel about your involvement with learning advisors in advising sessions."
- Semi-Structured Interviews: Conducted with five participants to explore key advisor behaviours impacting the learner-advisor relationship.

3. Data collection and analysis

3.1. Quantitative data collection and analysis

Data collection involved an online questionnaire (quantitative) including open-ended write-in responses. Quantitative analysis included Multivariate Analysis of Variance (MANOVA) to assess session frequency effects on need satisfaction, and Linear Regression to examine relationships between perceived autonomy support and basic psychological need satisfaction. Confirmatory Factor Analysis (CFA) validated the measurement model using JASP 0.18.3 software.

3.2. Qualitative data collection and analysis

Data collection involved open-ended write-in responses (included as part of the main questionnaire), and semi-structured interviews (qualitative). The qualitative data were analysed through the lens of SDT's basic psychological need theory (Ryan & Deci, 2017) and related positive growth and resilience outcomes (Assor, Benita, & Geifman, 2023a). Interpretative coding (Hatch, 2002; Willis, 2007) and a social constructivist approach to grounded theory (Charmaz, 2008) were the primary qualitative analytical tools. A priori codes identified indicators of need satisfaction based on participants' advising experiences, while an inductive analysis focused on positive growth outcomes aligned with autonomy-supportive practices (Assor et al., 2023a, p. 378). This involved coding learner comments as indicators of flourishing and well-being in autonomy-supportive environments. Semi-structured interviews with five randomly selected participants examined key advisor behaviours enhancing the learner-advisor relationship using a tool based on "The Classification of Advisor Behaviours Supportive of Basic Psychological Needs" (Fig. 4; Shelton-Strong & Tassinari, 2022, p. 199–201). Further inductive coding of learner comments from the interview data identified examples of specific advisor behaviours facilitating need support. Interviews lasted approximately 20 minutes and were conducted in-person (3) or remotely (2). The university's ethics review board approved this study, and all participants provided written informed consent. See Table 1 for a visual representation of the data collection phases.

Table 1
Mixed-methods explanatory sequential and concurrent triangulation design.

Phase	Procedure	Outcome
Phase 1. Quantitative and Qualitative data collection (concurrent)	• LCQ and BPNSR questionnaire $+$ open choice and openended write-in questions	Quantitative and Qualitative data
Phase 2. Qualitative data collection (sequential)	Semi-structured interviews	Qualitative interview data
Phase 2. Quantitative data analysis	 JASP software 0.18.3 	 Descriptive and inferential statistics
Phase 3. Qualitative data analysis I	Deductive and inductive coding of learner involvement with learning advisors	 Initial codes of themes for BPNS and learner involvement with LAs
Phase 3.1 Qualitative data analysis II	Coding and content analysis	 Content re-coded based on positive outcomes of autonomy-supportive practices
Phase 3.2 Qualitative data analysis III	 Inductive coding of interview data 	 Specific advisor behaviours facilitating BPN support
Phase 4. Data merging phase	 Results interpreted 	 Integration of results and discussion

4. Research findings

4.1. Quantitative results

Descriptive analyses. The associations between the measures used to understand the autonomy-supportive nature of learner involvement in Advising sessions and the potential for basic psychological need satisfaction within the learner-advisor relationship were examined first as a preliminary step. Results of these analyses are summarized in Table 2. Students generally perceived the advising environment as highly autonomy-supportive (M = 6.17, SD = 1.01) and reported high levels of basic psychological need satisfaction within the learner-advisor relationship, particularly in terms of autonomy (M = 5.89, SD = 1.05) and relatedness (M = 6.01, SD = 0.96). Competence satisfaction was reported at a moderate level (M = 4.43, SD = 0.46). All variables in the model significantly correlated with each other in the expected directions, with correlation magnitudes ranging from medium to large. The autonomy-supportive nature of the learning climate perceived by the participants in advising sessions showed strong positive correlations with Autonomy satisfaction (r = .71, p < .001) and Relatedness satisfaction (r = .73, p < .001) in the advising relationship (BPNSR) showed a strong positive correlation between Autonomy and Competence (r = .57, p < .001), while Autonomy and Relatedness demonstrated a very strong positive correlation (r = .82, p < .001). Competence and Relatedness also exhibited a strong positive correlation (r = .57, p < .001).

These results suggest that students who perceived the advising environment as more autonomy-supportive also reported higher satisfaction of their basic psychological needs in the advising relationship. The strong correlations between the BPNSR variables of autonomy, competence, and relatedness indicate that these needs are closely interrelated in the context of the learner-advisor relationship. These findings provide a foundation for understanding the relationships between the autonomy-supportive potential of learner involvement in advising in language learning sessions and basic psychological need satisfaction in advising relationships, which will be further explored in subsequent analyses.

To probe these results further, multiple statistical methods were employed to examine the relationships between advising sessions, the autonomy-supportive learning climate, and BPNSR. The main statistical methods used were Multivariate Analysis of Variance (MANOVA), Linear Regression, and Confirmatory Factor Analysis (CFA).

Multivariate analysis of variance. A multivariate analysis of variance (MANOVA) was conducted to examine the impact of the number of advising sessions on perceptions of the autonomy-supportive nature of the sessions and BPNSR. Using JASP 0.18.3 statistical software (JASP Team, 2024), the impact of the number of advising sessions (1 session, 2–4 sessions, 5–7 sessions, and 8–10 or more) on the perceived satisfaction of students' need for autonomy, competence, and relatedness were examined. The Pillai's Trace test revealed a marginally significant effect of advising sessions (V = 0.187, F(6, 122) = 2.096, p = 0.058). Similarly, the Wilks' Lambda test indicated a marginally significant effect ($\Lambda = 0.821$, F(6, 120) = 2.069, p = 0.062). Subsequent univariate ANOVAs also showed a marginally significant effect of the number of advising sessions on the autonomy-supportive nature of the advising sessions (F(3, 61) = 2.198, p = 0.097). However, no statistically significant impact was found for the number of advising sessions on basic psychological need satisfaction in the advising relationship (F(3, 61) = 1.538, p = 0.214).

Linear regression analysis. A linear regression analysis examined the relationship between participants' perception of the autonomy-supportive nature of the advising sessions and BPNSR. The results supported the hypothesis (H1a) that learners who voluntarily participate in advising sessions perceive these as an autonomy-supportive learning climate, which positively correlates with their experience of basic psychological need satisfaction. A significant positive relationship was found between the autonomy-supportive learning climate and BPNSR ($\beta = 0.784$, p < .001), indicating that as students' perceptions of the learning climate improve, their basic psychological need satisfaction also increases. The model explained a significant proportion of variance in BPNSR ($R^2 = 0.614$, adjusted $R^2 = 0.608$, F(1, 63) = 100.14, p < .001). The regression equation was: Predicted BPNSR = 1.945 + 0.784(Autonomy-Supportive Learning Climate), suggesting that for every one-unit increase in perceived autonomy support, BPNSR increases by 0.784 units. Notably, although a marginally positive effect in need satisfaction increasing over repeated sessions was noted, the hypothesis (H1b) that the number of advising sessions attended would significantly predict BPNSR did not hold across all session groupings, suggesting that the *quality* of the advising relationship is more critical than the quantity of sessions in nurturing students' basic psychological need satisfaction.

To investigate this further, an additional analysis treating the number of advising sessions as a continuous variable was conducted to determine if a linear relationship existed between session attendance and basic psychological need satisfaction. The results indicated that, while H1a continued to be supported, an increased quantity of sessions, when treated as a continuous variable, did not lead to an

 Table 2

 Descriptive Statistics and Intercorrelations for All Variables.

Variables	M	SD	1	2	3	4
Autonomy-supportive learning climate (LCQ)	6.17	1.01	_			
2. BPNSR Autonomy	5.89	1.05	.71***	_		
3. BPNSR Competence	4.43	0.46	.46***	.57***		
4. BPNSR Relatedness	6.01	0.96	.73***	.82***	.57***	_

^{***} p < .001; BPNSR = Basic Psychological Need Satisfaction in Relationships

Note: The Autonomy-supportive learning climate variable = the Learning Climate Questionnaire (LCQ) composite scores.

increase in basic psychological need satisfaction over time. This result is consistent with the previous analysis using categorical session groupings.

Confirmatory Factor Analysis. A CFA was conducted to validate the measurement model of an autonomy-supportive learning climate and basic psychological need satisfaction in relationships (BPNSR) within the learner-advisor relationship. The two-factor model showed a reasonably good fit: $\chi^2(26) = 49.537$, p = .004, CFI = 0.944, TLI = 0.922, RMSEA = 0.118, 90 % CI [0.066, 0.168], SRMR = 0.057. While the RMSEA was higher than ideal, other fit indices were acceptable. All items loaded significantly onto their respective factors (p < .001), with standardised loadings ranging from 0.625 to 0.918 for Factor 1 (autonomy-supportive learning climate) and 0.613–0.930 for Factor 2 (BPNSR). The factors showed a strong positive correlation (r = 0.817, p < .001) indicating a close relationship between the autonomy-supportive learning climate and BPNSR. Internal consistency was good (McDonald's ω = 0.892 for Factor 1, ω = 0.899 for Factor 2). Convergent validity was supported by AVE values (0.610 for Factor 1, 0.783 for Factor 2). The KMO measure (0.877) and Bartlett's test ($\chi^2(36)$ = 420.637, p < .001) indicated sampling adequacy. These results support the validity of the two-factor structure, confirming that an autonomy-supportive learning climate and BPNSR are distinct but closely related constructs in language learning advising sessions. The strong correlation between these factors (r = 0.817) suggests a robust relationship between students' perceptions of an autonomy-supportive environment and their basic psychological need satisfaction in the advising relationship, indicating that efforts to enhance one may positively influence the other.

4.2. Qualitative findings

4.2.1. Basic psychological need satisfaction

The qualitative findings in this first phase are drawn from participants' responses to an open-ended write-in question, where they were invited to describe their involvement with learning advisors in advising sessions. These responses underwent an interpretive analysis to identify the principal basic psychological need(s) support most clearly connected with each self-reported description. Tables 3 and 4 presents the breakdown of participants' responses, showing the number of need-supportive examples (single or combination) and positive outcomes identified in the learner descriptions of their involvement with learning advisors. This analysis aligns with SDT's theoretical underpinnings regarding the interdependence of the three basic psychological needs (Davis, 2022). The full analysis of the learners' self-reports follows (see 4.2.2) and is presented in Tables 5–10.

4.2.2. Positive outcomes

This section presents the findings from the study's inquiry into the positive outcomes that learners may experience in relation to their language learning journey when perceiving the advising sessions as need supportive. This iteration employed an interpretive paradigm (Hatch, 2002; Willis, 2007), using five positive outcomes as a priori codes to reassess learners' reported experiences. These outcomes are associated with autonomy-supportive environments and general basic psychological need satisfaction (Assor et al., 2023a). This analysis, part of the qual + QUAN approach, sought to provide further depth and definition to provide a comprehensive picture of the facilitation of an autonomy-supportive climate within advising sessions and need-satisfaction within the learner-advisor relationships. These positive outcomes, drawn from Assor et al.'s (2023a) work are contextualised as directly related to autonomy need satisfaction. Autonomy support is crucial for experiencing the benefits of competence-support and relatedness-support, as structure and involvement can be provided in either controlling or autonomy-supportive ways (Reeve, 2023). Thus, these outcomes are defined considering all three needs, envisioning general need-satisfaction as likely antecedents to these positive outcomes (see Fig. 3). Table 3 summarizes the number of instances each positive outcome was coded to learners' involvement with advisors, categorised by the three basic psychological needs.

Six representative examples of the full qualitative analysis of the participants' responses in which evidence of basic psychological need satisfaction and associated positive outcome were identified are provided in Tables 5-10. These examples highlight diverse dimensions of how autonomy-supportive environments impact learners' experiences. Note that each description was analysed first for evidence of basic need satisfaction followed by an interpretation of ways specific positive outcomes associated with autonomy-supportive environments can be identified as embedded within the experience.

In the first example, (see Table 5) the basis of autonomy support in which the learner's perspective and needs are valued is highlighted. The learner expresses a sense of belonging and significance in their involvement with the advisor, indicating strong rapport. The learner demonstrates growing self-awareness regarding their engagement in the sessions and recognises the motivating implications of the co-constructed advising dialogue.

Table 3

Analysis of Need Satisfaction Through Involvement with Learning Advisors.

Qualitative Evidence of Need Satisfaction	*Autonomy	*Competence	*Relatedness
Autonomy, Competence, Relatedness	22	22	22
Autonomy, Relatedness	22		22
Autonomy, Competence	5	5	
Competence, Relatedness		4	4
Competence		6	
Relatedness			4

Note: Number of instances each need or combination of needs was identified from learner description of involvement with learning advisors

Table 4Positive Outcomes Related to Experiencing Advising as an Autonomy-supportive Learning Climate and general BPN satisfaction within the Learner-learner Relationship.

Positive Outcomes	Autonomy	Competence	Relatedness
Autonomous Persistence & Engagement	31	29	29
Sense of Personal Growth	35	27	33
Норе	24	19	28
Meaning	28	12	27
Resilience & Positive Coping	14	9	14

Note: Number of instances positive outcomes were coded to each learners' comments

Autonomous Persistence and Engagement in the Context of SDT:

In SDT, autonomous persistence and engagement are expressions of self-determined motivation. This is characterised by individuals willingly participating in activities aligned with their values and interests. Driven by intrinsic motivation and internalised extrinsic motivation (identified and integrated orientations), individuals find personal meaning in their pursuits, engaging in activities they recognise as important—even if not inherently enjoyable (Reeve, 2022b).

Sense of Personal Growth in the Context of SDT:

A sense of personal growth in SDT is linked primarily to fulfilling the needs for competence and autonomy. It involves engaging in activities that challenge skills, leading to subjective experiences of progress and accomplishment. Personal growth is associated with intrinsically motivating tasks that enhance efficacy and mastery while promoting eudaimonic well-being—realizing one's potential and living authentically. Fulfilment of relatedness also creates conditions conducive to growth and flourishing (Assor, 2016; Deci & Ryan, 2016).

Hope in the Context of SDT:

Hope aligns with the basic psychological needs for autonomy, competence, and relatedness within SDT. It encompasses a sense of agency and confidence in pursuing personally meaningful goals. Hope connects with intrinsic motivations and activities resonating with one's authentic self, drawing individuals toward need-satisfying experiences when environmental conditions are supportive. Hope also relates to perceived competence for goal attainment, which is essential for promoting autonomous motivation (Wisniewski et al., 2018; Deci & Ryan 2016).

Meaning in the Context of SDT:

In SDT, meaning is intricately tied to the fulfilment of the basic psychological needs for autonomy, competence, and relatedness. Meaningful activities are those chosen because they align with personal values and contribute to a sense of purpose. This includes pursuing intrinsically or externally integrated goals that foster significance and fulfilment through self-concordance—aligning goals with authentic interests, emphasising the importance of autonomously driven behaviours for creating a satisfying life (Vansteenkiste et al., 2018; Guay, 2022; Sheldon & Holberg, 2023)

Resilience and Positive Coping in the Context of SDT:

Resilience and positive coping are connected to fulfilling basic psychological needs—particularly autonomy and relatedness—within SDT. Individuals who are autonomously motivated and have supportive social relationships are more likely to demonstrate resilience and employ positive coping strategies when facing challenges. SDT emphasises the importance of fostering autonomous motivation and supportive social connections that satisfy the need for relatedness. Feeling competent significantly enhances resilience, as autonomy-supportive environments foster flexible and adaptive responses to challenges (Guay et al., 2008; Shih, 2019).

Fig. 3. Definitions of positive growth and resilience outcomes from an SDT perspective (Assor, 2016; Deci & Ryan, 2016; Guay 2022; Guay et al., 2008; Sheldon and Holberg 2023; Shih 2019; Wisniewski et al., 2018).

Notes: Based on Assor et al., 2023a, p. 378

The second comment (see Table 6) illustrates how the reflective dialogue at the heart of effective advising can be both restorative and awareness-raising. In this case, the learner notices essential information about their feelings and beliefs regarding their language skills—insights that emerge when they are asked authentic, interested questions or indirectly challenged through reflective inquiries. This interpersonal support fosters autonomous motivation as the learner begins to "notice a lot of things which I couldn't expect," creating opportunities for self-reflection and ownership of their learning and emotions, ultimately enhancing need satisfaction.

In the third learner's description (see Table 7) of their involvement with advisors, the student demonstrates a keen awareness of the experience of being listened to. This experience supports their autonomy and relatedness as they feel their beliefs, ideas, and concerns

Table 5

Qualitative evidence of basic psychological need support and related positive outcomes.

Student Comment (1) on involvement with Learning Advisor

"I feel my learning adviser is friendly and kind. He fits my pace and gives me good advice. We talked about not only studying but also our private story. I think that it is also related to my motivation."

Basic Psychological Needs:

Autonomy The student feels supported in their autonomy as the advisor takes the learner's perspective, fits their pace and engages in

personally meaningful conversations beyond language study.

Competence The student perceives the advisor's suggestions as valuable and effective, enhancing their sense of competence.

Relatedness Engaging in conversations about personal stories fosters a sense of connection and belonging with the advisor, fulfilling

relatedness.

Positive Outcomes:

Meaning Engaging in conversations beyond studying provides meaning to the interaction, making it more than just an academic

exercise, enhancing motivation.

Perceiving the message as valuable and experiencing feelings of support contributes to the student's personal growth and Sense of Personal Growth

development. Feeling supported and understood by the advisor may draw the student towards continued engagement in advising

Autonomous Persistence and

Engagement sessions.

Table 6 Qualitative evidence of basic psychological need support and related positive outcomes.

Student Comment (3) on involvement with Learning Advisor

"I sometimes be unconfident and negative about my language skills, but my adviser always asks me why I feel so. Then, I can notice a lot of things which I couldn't expect. I have been really helped by these sessions, and I can talk comfortably, so I love it."

Basic Psychological Needs: Autonomy The learner is prompted to reflect deeply on their feeling and their origins, leading to new insight and self-awareness. This

helps the learner explore congruence between values, beliefs, goals and behaviour, leading to self-endorsement of change

from within

Competence Through the advisor's questions in the reflective dialogue the student experiences personal growth as they are led to

identify areas they hadn't noticed, enhancing their sense of competence.

Relatedness The supportive interaction with the advisor fosters a sense of connection, belonging, acceptance, and freedom to be

authentic, fulfilling the need for relatedness.

Positive Outcomes:

The advisor's inquiry and interest instil hope in the student, motivating them to continue their language learning journey. Hope Sense of Personal Growth

Reflecting on their feeling about their language skills and noticing what they can do to improve these contributes to the

student's sense of personal growth.

Autonomous Persistence and

Engagement

Feeling helped and supported by the advisor and learning to notice and become aware of ways they can help themselves encourages the student to persist in their language learning efforts independently.

The student's ability to talk comfortably about their language struggles and receive affective support from the advisor helps

Resilience and Positive Coping them cope with feelings of inadequacy and change their perspective.

are validated, allowing them to feel authenticated as partners in the conversation. This metacognitive awareness of the advisor's purposeful listening—wanting to understand the student's position and feelings before responding—can be a powerful motivator for the learner to engage proactively and authentically, thereby supporting their autonomy and relatedness needs.

As in the previous comment, the fourth student's example (see Table 8) highlights experiences that strongly support their autonomy and need for connection and care The learner expresses feeling safe to "talk about everything because they always listen to me kindly," suggesting an intrinsic interest in engaging proactively—an action that feels fully self-endorsed. This example illustrates how need satisfaction arises when the learner communicates their preferences, asks questions, and knows they will be listened to in return, receiving "some messages that I need at that time." This aligns with Reeve's (2022b) conceptualisation of the interconnections among

Qualitative evidence of basic psychological need support and related positive outcomes.

Student Comment (24) on involvement with Learning Advisor

"I like how they listen to my opinion first before they give advice. They try to understand the students first before saying something."

Basic Psychological Needs:

By listening empathetically and mindfully to the student's opinion first supports the student's autonomy by taking their Autonomy

perspective, showing interest, displaying patience, and in this way placing the student at the centre of the learning process. The advisors' effort to understand the students fosters a sense of connection and belonging, fulfilling the need for relatedness.

Positive Outcomes:

Relatedness

The learner's awareness that the advisor is interested and values their experience and needs, adds meaning to the student's Meaning

learning experience, making it more purposeful and valuable.

Sense of Personal Growth The advisors' openness and effort to understand the learner contributes to the student's growth and development through

opportunities to express themselves; their hopes, interests, needs, and challenges

Hope The student's experience of being listened to and feeling their opinions are valued, fosters a sense of optimism and motivation in

their language learning journey.

Table 8

Qualitative evidence of basic psychological need support and related positive outcomes.

Student Comment (27) on involvement with Learning Advisor

"I can talk everything because they always listen to me kindly and give me some messages that I need at that time."

Basic Psychological Needs:

Feeling listened to and understood suggests the advisor encourages expression using non-pressuring language, supporting Autonomy

the student's autonomy. Receiving meaningful and empathetic responses supports the learner's autonomy as the learner

feels the advisor values their perspective.

Relatedness Feeling freedom to speak about personal concerns and being listened to with care fosters a sense of connection and

belonging with the advisor, fulfilling the need for relatedness.

Positive Outcomes:

Meaning

Feeling listened to and understood adds meaning to the student's advising experience, making it more purposeful and

valuable.

Hope Receiving messages and guidance from the advisor foster hope in the student, motivating them to continue their language

learning journey

Autonomous Persistence and

Engagement

Feeling listened to and understood encourages the student to persist in their language learning efforts independently.

Table 9

Qualitative evidence of basic psychological need support and related positive outcomes.

Student Comment (30) on involvement with Learning Advisor

"It feels like I'm talking to a close friend who will support me no matter what."

Basic Psychological Needs:

Autonomy Feeling supported unconditionally like a true friend during advising sessions suggests that the advisor takes the student's perspective,

listens mindfully, shows interest in the learner, and displays patience. This supports the learner's need for autonomy and encourages

Relatedness Experiencing unconditional positive regard and being valued by the advisor fosters a sense of connection and belonging, fulfilling the

need for relatedness.

Positive Outcomes:

Meaning Feeling as if talking to a close friend adds meaning to the student's advising experience, making it more purposeful and valuable. Sense of Personal The advisor's openness to understand the learner contributes to the student's growth and development through opportunities to

Growth express themselves; their hopes, interests, needs, and challenges.

Table 10

Qualitative evidence of basic psychological need support and related positive outcomes.

Student Comment (31) on involvement with Learning Advisor

"I sometimes go to the learning adviser when I don't have motivation for learning. And I want to listen to the view from another person. I always get positive feeling after the session.

Basic Psychological Needs:

Autonomy Seeking out the learning advisor when lacking motivation indicates a volitional, self-directed effort to address one's

learning needs, i.e. crafting need satisfying experiences.

Seeking the perspective of another person, in this case, the learning advisor, resulting in a positive feeling, demonstrates Relatedness

authentic social connection and caring support in the learning process.

Positive Outcomes:

Seeking advice from the learning advisor suggests a hope for finding solutions and gaining a fresh perspective on learning. Resilience and Positive Coping Feeling positive after the advising session suggests effective coping with the initial lack of motivation and a sense of

resilience in overcoming it. **Autonomous Persistence and**

Engagement

Actively seeking support from the learning advisor indicates a commitment to persist in the face of motivational challenges.

autonomy, autonomy support, and agentic engagement, and pro-active crafting of need satisfaction. The learner feels supported in their autonomy and personal connection, leading to autonomous engagement with the environmental support available (the advising dialogue and relationship), which satisfies their autonomy needs. This positive dynamic results in numerous beneficial outcomes, including hope, meaning, and autonomous persistence.

The final two examples illustrate how students experience autonomy and relatedness in different ways, leading to distinct positive outcomes. In the fifth description (see Table 9), the learner expresses full confidence in the learner-advisor relationship and experiences unconditional positive regard. This fosters a sense of freedom for the learner to be authentic and creates an atmosphere conducive to honest disclosure, cementing bonds and trust. As a result, this fosters significance and care, helping establish an autonomy-supportive learning climate that enhances meaning and personal growth as they feel valued and competent.

The final description (see Table 10) indicates another example of a student crafting need satisfaction as they agentically engage with the need-supportive environment. In line with SDT's perception of our innate growth-oriented nature, people will naturally seek out need satisfaction and attempt to transform their environment to render it more need-satisfying (Ryan & Deci, 2020). When needing relational support and an authentic exchange of ideas, the learner seeks out the advisor because they "want to listen to the view from another person." This reflects an important aspect of the learner-advisor relationship as a readily available source of environmental

The Wheel of Reflection on the Advising Relationship

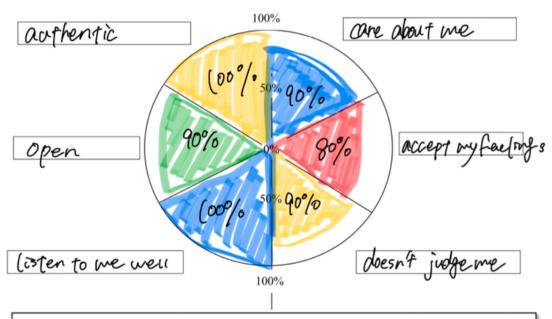
Consider for a moment your relationship with the Learning Advisors you have worked with. How important is this relationship to your personal self-understanding, beliefs, motivation, and your language learning progress?

Please choose six areas that you want to focus on because you feel they are important to your Advisor – Advisee relationship. Below are some examples. You can also use your own ideas!

E.g., Takes my perspective, uses non-pressuring language, gives me reasons for suggestions, shows empathy, helps me to reflect, believes in me, is <u>authentic</u> and transparent, helps me with challenges and goals, cares about me, gives me clear feedback, accepts my feelings, shows interest in me, gives me choices and options, doesn't judge me, listens to me well, helps me change, is open and kind.

This wheel represents some of the important elements of this relationship. The outer edge represents 100% impact, while the centre represents 0% impact on your whole person. Consider your current feelings and past experiences with Learning Advisors. Then colour in the sections in the circle below to represent important/impactful the different elements are that you identified.

How important / impactful are these elements in my relationships with learning advisors?



Discuss your wheel together. Think about your current and past experiences. Reflect on why you chose these areas to focus on, how important are these areas to your relationships with advisors, and why.

Can you identify any reasons/issues causing your current feelings?

Can you think of any ways that you contribute to this relationship and your role in it?

What do you like most about your relationships with advisors? How does this experience help you as a language learner, as a university student and as a person in your life?

Fig. 4. Learner example of 'The Wheel of Reflection on the Advising Relationship'.

autonomy support (Mynard & Shelton-Strong, 2020; Mynard et al., 2022). This learner shows metacognitive awareness of the support available suggesting intrinsic motivation to arrange further meetings with expectations of open dialogue, empathetic listening, and fresh perspectives that can serve as motivational support even between sessions, feeding an inner well of motivation with knowledge that help is available when needed.

Table 11Need-supportive advisor behaviours valued in Advising relationship.

Advisor's need- supportive behaviours	No. of students who chose this	Average % of impact on Advising relationship	Sample learner comment
Accepts my feelings	4 out of 5	90 %	"When I complained about my class my advisors accepted my feelings, like, 'I know what you mean, I understand your feelings'. I felt so relieved."
Uses non-pressuring language	3 out of 5	80 %	"Advisors don't use pressuring language, so it makes me feel to think wider."
Listens to me well	3 out of 5	96 %	"When the advisor reacts to me well with facial expressions and asks questions with the right timing, I feel they listen well - then I try to talk more and more about myself, so I feel this is very important."
Helps me reflect	3 out of 5	90 %	"They don't give direct answers, through discussion I feel they change my direction. I don't know specific way, but yeah, their behaviour, way of speaking, facial expression, gestures, or something."
Doesn't judge me	2 out of 5	90 %	"I can talk about anything because I can be honest. I often talk not only about English learning, but we can talk about like, life outside."
Gives reasons for suggestions	2 out of 5	80 %	"It makes me want to try it, to accept the suggestion."
Helps me with challenges / goals	2 out of 5	75 %	"She gave me suggestions, and this helped me feel less nervous."
Gives me clear feedback	2 out of 5	73 %	It's motivating and makes me feel to do more effort."
Cares about me	2 out of 5	70 %	"When I feel depressed about my English advisors ask why and listen to me."
Shows empathy	1 out of 5	100 %	"When I say what I'm honestly feeling and the LA shows empathy I feel it's like saying we are human beings, like we can feel the same way and I feel accepted."
Gives me choice and options	1 out of 5	100 %	"She said if you find it not interesting to for you, you can just change to another strategy."
Is authentic and transparent	1 out of 5	100 %	"When advisors give me suggestions from their experience and being authentic, it makes me feel I can be authentic too and share my real experiences and feelings."
Is open and kind	1 out of 5	90 %	"When they share their experiences and struggles it makes me feel connected."
Takes my perspective	1 out of 5	60 %	"It's OK if my ideas are different. But it is good if they understand me."

4.2.3. What students valued in the learner-advisor relationship

The third phase of analysis aimed to identify key advisor behaviours that enhanced the need-supportive nature of the learner-advisor relationship from the learners' perspective. To address Research Question 2 and further explore the need-supportive nature of advising sessions, qualitative data were collected through semi-structured interviews with five of the study participants 4–6 weeks after the initial phase. The interviews employed "The Wheel of Reflection on the Advising Relationship" tool (see Fig. 4), which prompted participants to reflect on need-supportive advising behaviours based on "The Classification of Advising Behaviours Supportive of Basic Psychological Needs" (Shelton-Strong & Tassinari, 2022, pp. 199–201). Participants selected six areas from a list of 17 and considered their relative importance in the learner-advisor relationship. This section presents the advisor behaviours chosen for reflection and discussion by each participant. This completes the triangulation of data in this study, adding a further dimension to highlight the autonomy support provided by advisors, emphasising the key behaviours that participants perceive enhance the need-supportive nature of the learner-advisor relationship.

From the larger pool of need-supportive advising behaviours, each learner made different choices. The number of students who chose each behaviour, along with the average percentage of importance assigned to these behaviours in the learner-advisor relationship, is presented in Table 11. An extract from the interviews is included to illustrate the learner's perception of the effect of these behaviours in the learner-advisor relationship. These findings illustrate the purposeful language and behaviours which advisors utilise and highlight key elements that contribute to fostering an autonomy-supportive environment and support for students' basic psychological needs.

5. Discussion and implications

This study investigated how undergraduate language learners in Japan experienced their involvement in Advising in Language Learning through a combination of quantitative and qualitative methods. Specifically, it sought to determine the degree to which learners experienced their advising sessions as supportive of their basic psychological needs and the flourishing and well-being outcomes associated with need satisfaction. The quantitative results confirmed that autonomy support in advising sessions was a significant predictor of basic psychological need satisfaction (β =.784, F(1, 63) = 100.14, p < .001) within the learner-advisor relationship, validating the two-factor model, with a large effect size. The autonomy-supportive nature of the advising sessions accounted for substantial variance (R^2 =.614, adjusted R^2 =.608) in need satisfaction, indicating that as learners perceived these sessions as more autonomy-supportive, their psychological need satisfaction also increased. Although repeated sessions had a marginally positive effect, this was not significant, suggesting that the *quality* of the advising relationship, as measured by the autonomy-supportive learning climate, is more critical in supporting students' basic psychological needs than the *quantity* of sessions. Accordingly, it appears that the impact of advising is not simply a matter of quantity, but rather a complex interaction between session quality and individual student characteristics. Students with different needs and learning styles may respond differently to advising,

regardless of the frequency. Factors like advisor experience, the specific content of the advising sessions, and the student's pre-existing motivational orientation could all moderate the relationship between advising and outcomes. Further research is needed to explore these potential moderating effects. Nevertheless, these findings align with SDT's premise that psychological need satisfaction is determined by how one's environment is experienced, as either autonomy-supportive or controlling (Reeve, 2022a), and helps explain subsequent learner flourishing and well-being outcomes, as suggested by the qualitative analysis and findings. In short, students who perceived the advising experience as more autonomy-supportive reported higher satisfaction of their basic psychological needs, emphasising the importance of creating such environments through intentional autonomy-supportive practices (Reeve et al., 2022; Shelton-Strong & Tassinari, 2022).

The qualitative findings complemented and informed these results by revealing diverse learner experiences and specific ways learners' autonomy, competence, and relatedness needs were met through volitional involvement in the advising process. Participants highlighted the importance of being listened to in active and empathetic ways, feeling their perspectives were validated, and sensing emotional support and a connection with the advisors beyond the initial advisor-advisee relationship—all essential for supporting autonomy and relatedness—adding explanatory depth to the quantitative results. These autonomy-supportive practices were interpreted as leading to a range of positive outcomes, including autonomous persistence and engagement, resilience, positive coping, meaning, hope, and personal growth. The interpretative analysis process was instrumental in highlighting the interconnection and interdependence of SDT's basic psychological needs demonstrated within the subtleties of each student's experiences. This interconnectedness is evident in the advisor behaviours and student experiences described earlier in Tables 5-11 and in the additional comments below. While autonomy, competence, and relatedness are often treated separately—as needs they are highly interdependent, as are the advising behaviours that support them (Davis, 2022). Advisor behaviours such as empathic listening and validating student perspectives foster relatedness, creating a safe space that enhances autonomy by empowering authentic self-expression. Constructive, non-evaluative feedback and assistance with optimal challenges and goal setting enhance competence, contributing to overall need satisfaction. As one participant reported, "When I talk to them, I feel confidence and get motivation for studying and other things around me," while others shared: "I can listen to many different experiences from different learning advisors. It gave me a lot of different perspectives and many choices,", and "I feel really calm and think deeply about how to improve English". These comments illustrate how Advising can create a supportive environment where multiple needs are met simultaneously, fostering well-being and learner flourishing.

The semi-structured interviews revealed that incorporating SDT-informed practices, such as adopting the learner's perspective, active and empathetic listening, being authentic, acknowledging negative affect, and using non-controlling language, were all recognised by the participants as impactful to their relationship with advisors (Reeve & Cheon, 2024). Importantly, the advisor's role in providing meaningful informational feedback, encouraging self-discovery and reflection, and fostering an experience of ownership of their learning were identified as key contributors to autonomy and competence need satisfaction (Shelton-Strong, 2022; Shelton-Strong & Tassinari, 2022). These autonomy-supportive practices, evident in the qualitative findings and validated through the semi-structured interviews, fostered a range of positive outcomes for learners, including increased autonomous persistence and engagement, a sense of personal growth, hope, positive coping, and resilience, all hallmarks of learner flourishing (Assor, Benita, & Geifman, 2023b).

Taking an SDT lens to understand and enhance the practice of Advising provides a parsimonious framework to understand its affordances for language learners through the provision of conditions that bolster learners' need-satisfaction and flourishing. This study extends existing research on SDT in language education by examining the learner-focused context of intentional, caring, and readily available interpersonal support outside of the traditional classroom setting. By demonstrating the potential of Advising to nurture a need-supportive environment that promotes learner well-being and flourishing, this research highlights the importance of considering holistic learning experiences and the role of autonomy-supportive environments beyond the classroom (Mynard & Shelton-Strong, 2022a). This perspective aligns with Noels et al.'s (2019a) motivational model for language learning, which identifies the influential role significant others play in interpersonal relationships within social learning contexts both within and outside the classroom (Noels, 2023). Overall, this study and its findings widen our understanding of how learner involvement in Advising in Language Learning can support autonomy, competence, and relatedness, highlighting the downstream effects this experience can have on the broader context of students' lives and their development as language learners, bringing this dynamic into sharper focus. Ultimately, by prioritising autonomy support in advising programmes beyond the classroom (optimally in dedicated self-access learning centres) and underpinning this with a commitment to the continued professional development of learning advisors, institutions can foster a learning climate supportive of students' basic psychological needs, promoting lifelong flourishing and self-regulated learning as a core educational goal.

5.1. Implications and future directions

The study findings have important implications for research and practice in language education. Theoretically, it provides empirical support for SDT as a framework for understanding flourishing and well-being in language learning, particularly in advising contexts, reinforcing earlier work (Shelton-Strong, 2020, 2022). The strong relationship between autonomy-supportive advising sessions and learners' basic psychological need satisfaction underscores the value of adopting a need-supportive approach in advising programmes. For language learning advisors, the study offers insights into specific behaviours and practices that learners value and that facilitate an autonomy-supportive climate. By prioritising learners' basic psychological needs, advisors cultivate an environment that nurtures intrinsic motivation, self-regulation, and psychological well-being—essential elements for successful language learning and lifelong flourishing.

While this study focuses on learner experiences, the findings highlight the importance of advisor behaviours in creating need-supportive environments. Future research could explore how these insights might inform advisor training programs. Such training could incorporate reflective practice, and role-playing exercises based on adaptations on the classification of advising behaviours supportive of basic psychological needs (Shelton-Strong & Tassinari, 2022), the classification of teacher's motivational behaviours (Ahmadi et al., 2023), and exploratory discourse analysis of advising session transcripts. These approaches would allow advisors to identify and practice need-supportive behaviours, enhancing their ability to foster autonomy, competence, and relatedness need-satisfaction in learners. By grounding training in concrete examples from actual advising sessions, advisors can develop a fuller understanding of how to apply SDT principles in practice, ultimately contributing to a more autonomy-supportive learning climate that promotes learner flourishing and well-being.

Future research could explore the longitudinal impact of advising on learner well-being across different cultural and educational contexts and how need-supportive experiences translate to broader aspects of their lives. Studies investigating potential spillover effects of autonomy-supportive advising on classroom experiences, personal interactions, and engagement in self-access learning centres could further explore the interconnected nature of need satisfaction in various learning environments.

6. Conclusion and limitations

This study provides encouraging and compelling evidence that Advising in Language Learning is a need-supportive practice capable of facilitating an autonomy-supportive environment to foster basic psychological need satisfaction, enhance flourishing, and promote learner well-being. The mixed-methods approach allowed for additional depth and nuance in interpreting the qualitative and quantitative results. There is a strong sense that learner involvement in advising sessions helped facilitate a sense of ownership of the learning experience, feelings of personal growth and progress, and clear indications of students experiencing close and meaningful relationships within the learner-advisor relationship. The study provides valuable insights into the role of the learning advisor and their relationships with learners in supporting their basic psychological needs. The findings suggest that integrating autonomy-supportive practices in advising sessions can satisfy learners' needs for autonomy, competence, and relatedness, serving as a powerful agent of change and facilitating the conditions in which learners can flourish and thrive. While conducted within the specific context of a self-access learning centre at a small Japanese university, the study's insights contribute to a growing body of research on SDT in language education.

Limitations of this study include the sample size and focus on a single institutional setting, suggesting a need for further research in diverse cultural and educational contexts. While the sample size (n=65) may affect the generalisability of the quantitative findings and the statistical power of the analyses, this limitation is partially mitigated by the inclusion of the qualitative component, which provided rich, in-depth data on participants' experiences through self-reports and semi-structured interviews. The qualitative findings offer valuable insights into the subtleties of need support within the learner-advisor relationship and complement the quantitative results, providing a more comprehensive understanding of ways learners' experience need satisfaction within Advising sessions. Overall, despite these limitations, the study underscores the transformative potential of Advising in Language Learning as an autonomy-supportive practice in nurturing learner flourishing and provides valuable insights for practitioners and researchers in language education.

CRediT authorship contribution statement

Scott J. Shelton-Strong: Writing – review & editing, Writing – original draft, Methodology, Investigation, Formal analysis, Conceptualization.

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The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

Ahmadi, A., Noetel, M., Parker, P., Ryan, R. M., Ntoumanis, N., Reeve, J., Beauchamp, M., Dicke, T., Yeung, A., Ahmadi, M., Bartholomew, K., Chiu, T. K. F., Curran, T., Erturan, G., Flunger, B., Frederick, C., Froiland, J. M., González-Cutre, D., Haerens, L., & Lonsdale, C. (2023). A classification system for teachers' motivational behaviors recommended in self-determination theory interventions. *Journal of Educational Psychology, 115*(8), 1158–1176. https://doi.org/10.1037/

Assor, A. (2016). An instruction sequence promoting autonomous motivation for coping with challenging learning subjects. In W. Liu, C. K. Wang, & R. M. Ryan (Eds.), Building autonomous learners: Perspectives from research and practice using self-determination theory (pp. 153–168). Springer.

Assor, A., Benita, M., & Geifman, Y. (2023a). The authentic inner compass as an important motivational experience and structure: Antecedents and benefits. In R. M. Ryan (Ed.), *The Oxford handbook of self-determination theory* (pp. 362–386). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780197600047.013.19.

Assor, A., Benita, M., & Geifman, Y. (2023b). You can motivate others by nurturing five experiences that satisfy their need for autonomy: Authentic inner compass, authentic intentions, and freedom. In M. Bong, J. Reeve, & S.-I. Kim (Eds.), *Motivation science: Controversies and insights* (pp. 341–349). Oxford Academic. https://doi.org/10.1093/oso/9780197662359.003.0057.

Biswas-Diener, R. (2010). Practicing positive psychology coaching: Assessment, activities, and strategies for success. John Wiley and Sons.

Black, A. E., & Deci, E. L. (2000). The effects of instructors' autonomy support and students' autonomous motivation on learning organic chemistry: A self-determination theory perspective. Science Education, 84(6), 740–756. https://doi.org/10.1002/1098-237X(200011)84:6<740::AID-SCE4>3.0.CO;2-3

Charmaz, K. (2008). Constructionism and the grounded theory. In J. A. Holstein, & J. F. Gubrium (Eds.), Handbook of Constructionist Research (pp. 397–412). The Gillford Press.

Creswell, J., & Plano Clark, V. (2007). Designing and conducting mixed methods research. SAGE.

Curren, R., Boniwell, I., Ryan, R. M., Oades, L., Brighouse, H., Unterhalter, E., Kristjánsson, K., de Ruyter, D., Macleod, C., Morris, I., & White, M. (2024). Finding consensus on well-being in education. *Theory and Research in Education*, 22(2), 117–157. https://doi.org/10.1177/14778785241259852

Dalgas, B. W., Ntoumanis, N., Elmose-Østerlund, K., & Bredahl, T. V. G. (2024). Exploring the process of restoring psychological needs after incidences of frustration and need unfulfillment. Frontiers in Psychology, 15. https://doi.org/10.3389/fpsyg.2024.1413963

Davis, W.S. (2020). Flourishing through communicative language learning: An exploration of university learners' basic needs, well-doing, and well- being [Doctoral dissertation, University of Arkansas]. (https://scholarworks.uark.edu/etd/3803).

Davis, W. (2022). Autonomy, competence, relatedness, and beneficence: Exploring the interdependence of basic needs satisfaction in postsecondary world language education. *Journal for the Psychology of Language Learning*, 4(1), 1–19. https://doi.org/10.52598/jpll/4/1/2

Davis, W. S., & Printer, L. (2022). Toward a basic needs-supportive world language pedagogy: Four illustrative examples. Relay Journal, 5(1), 4–18. https://doi.org/10.37237/relay/050102

Deci, E. L., & Ryan, R. M. (2016). Optimizing students' motivation in the era of testing and pressure: A self-determination theory perspective. In W. Liu, C. K. Wang, & R. M. Ryan (Eds.), Building Autonomous Learners: Perspectives from Research and Practice Using Self-determination Theory (pp. 9–29). Springer.

Delrue, J., Reynders, B., Broek, G. vande, Aelterman, N., de Backer, M., Decroos, S., de Muynck, G. J., Fontaine, J., Fransen, K., van Puyenbroeck, S., Haerens, L., & Vansteenkiste, M. (2019). Adopting a helicopter-perspective towards motivating and demotivating coaching: A circumplex approach. *Psychology of Sport and Exercise*, 40. https://doi.org/10.1016/j.psychsport.2018.08.008

Dincer, A., Yeşilyurt, S., Noels, K. A., & Vargas Lascano, D. I. (2019). Self-determination and classroom engagement of EFL learners: A mixed-method study of the self-system model of motivational development. SAGE Open, 9(2), 1–15. https://doi.org/10.1177/2158244019853913

Duraiappah A.K., Van Atteveldt N.M., Buil J.M., et al. (2022). Summary for Decision Makers, Reimagining Education: The International Science and Evidence Based Education Assessment. New Delhi: UNESCO MGIEP.

Edmonds, W., & Kennedy, T. (2017). An applied guide to research designs. SAGE. https://doi.org/10.4135/9781071802779.

Egan, G. (1998). The skilled helper: A problem management approach to helping (6th ed). Brooks Cole.

Gregersen, T., & Mercer, S. (Eds.), (2022). The Routledge handbook of the psychology of language learning and teaching. Routledge.

Guay, F. (2022). Applying self-determination theory to education: Regulations types, psychological needs, and autonomy supporting behaviors. Canadian Journal of School Psychology, 37(1), 75–92. https://doi.org/10.1177/08295735211055355

Guay, F., Ratelle, C. F., & Chanal, J. (2008). Optimal learning in optimal contexts: the role of self-determination in education. In Canadian psychology/Psychologie canadienne, 49 pp. 233–240). https://doi.org/10.1037/a0012758

Hatch, J.A. (2002). Doing qualitative research in education settings. Albany, NY: SUNY Press.

Herrera, D., Matos, L., Gargurevich, R., Lira, B., & Valenzuela, R. (2021). Context matters: Teaching styles and basic psychological: Predicting flourishing and perfectionism in university music students. Frontiers in Psychology, 12. Article 623312. https://doi: 10.3389/fpsyg.2021.623312.

Howard, J.L., Slemp, G.R., & Wang, X. (2024). Need Support and Need Thwarting: A Meta-Analysis of Autonomy, Competence, and Relatedness Supportive and Thwarting Behaviors in Student Populations. Personality and Social Psychology Bulletin. https://doi.org/10.1177/01461672231225364.

Jang, H., Kim, E. J., & Reeve, J. (2012). Longitudinal test of self-determination theory's motivation mediation model in a naturally occurring classroom context. Journal of Educational Psychology, 104, 1175–1188. https://doi.org/10.1037/a0028089

JASP Team (2024). JASP 0.18.3 [Computer software]. https://jasp-stats.org.

Kato, S. (2025). Advising in language learning. In H. Nesi, & P. Milin (Eds.), Reference module in social sciences. International Encyclopaedia of Language and Linguistics (3rd ed.). Elsevier. https://doi.org/10.1016/B978-0-323-95504-1.00222-2.

Kato, S. & Mynard, J. (2016). Reflective dialogue: Advising in language learning. Routledge.

Kelly, R. (1996). Language counselling for learner autonomy: The skilled helper in self-access language learning. In R. Pemberton, E. S. L. Li, W. W. F. Or, & H. D. Pierson (Eds.), *Taking Control: Autonomy in Language Learning* (pp. 93–113). Hong Kong University Press.

Knee, R. C., & Browne, L. (2023). Relationships motivation theory. In R. M. Ryan (Ed.), *The Oxford Handbook of Self-determination Theory* (pp. 160–183). Oxford University Press.

La Guardia, J. G., Ryan, R. M., Couchman, C. E., & Deci, E. L. (2000). Within-person variation in security of attachment: A self-determination theory perspective on attachment, need fulfilment, and well-being. *Journal of Personality and Social Psychology*, 79(3), 367–384. https://doi.org/10.1037/0022-3514.79.3.367

Lantolf, J., Thorne, S. L., & Poehner, M. (2015). Sociocultural theory and second language development. In B. van Patten, & J. Williams (Eds.), *Theories in Second Language Acquisition* (pp. 207–226). Routledge.

Laporte, N., Soenens, B., Brenning, K., & Vansteenkiste, M. (2021). Adolescents as active managers of their own psychological needs: The role of psychological need crafting in adolescents' mental health. In *Journal of Adolescence*, 88 pp. 67–83).

Martela, F. (2024). Flourishing as the central aim of education: Steps toward a consensus. *Theory and Research in Education*, 22(2), 180–188. https://doi.org/10.1177/14778785241258857

Martela, F., & Sheldon, K. M. (2019). Clarifying the concept of well-being: Psychological need satisfaction as the common core connecting eudaimonic and subjective well-being. Review of General Psychology, 23(4), 458–474. https://doi.org/10.1177/1089268019880886

Mercer, S., & Gregersen, T. (2023). Transformative positive psychology in the acquisition of additional languages. Journal of Multilingual and Multicultural Development. https://doi.org/10.1080/01434632.2023.2194869.

Mercer, S., & Ryan, S. (2016). Stretching the boundaries: language learning psychology. Palgrave Communications, 2, Article 16031. https://doi.org/10.1057/palcomms.2016.31.

Mezirow, J. (1991). Transformative dimensions of adult learning. Jossey-Bass.

Mouratidis, A., Vansteenkiste, M., Michou, A., & Lens, W. (2013). Perceived structure and achievement goals as predictors of students' self-regulated learning and affect and the mediating role of competence need satisfaction. Learning and Individual Differences, 23, 179–186. https://doi.org/10.1016/j.lindif.2012.09.001

Mozzon-McPherson, M. (2019). Mindfulness and advising in language learning: An alternative theoretical perspective. Mélanges CRAPEL, 40(1), 88–113.

Mozzon-McPherson, M., & Tassinari, M. G. (2020). From teachers to advisors. A Journey map Philologia Hispalensis, 34(1), 121–139.

Murray, G. (2018). Self-access environments as self-enriching complex dynamic ecosocial systems. Studies in Self-Access Learning Journal, 9(2), 102–115. doi: 10.37237/090204.

Mynard, J. (2021). Advising for language learner autonomy: Theory, practice, and future directions. In M. Jiménez Raya, & F. Vieira (Eds.), Autonomy in Language Education: Present and Future Avenues (pp. 46–62). Routledge.

Mynard, J. (2023). Promoting reflection on language learning: A brief summary of the literature. In N. Curry, P. Lyon, & J. Mynard (Eds.), Promoting Reflection on Language Learning: Lessons from a University Setting (pp. 23–37). Multilingual Matters.

Mynard, J. (2024). Self-access language learning support in Europe: Observations and current practices. Studies in Self-Access Learning Journal, 15(2), 258–279. https://doi.org/10.37237/150209

- Mynard, J., Ambinintsoa, D. V., Bennett, P. A., Castro, E., Curry, N., Davies, H., Imamura, Y., Kato, S., Shelton-Strong, S. J., Stevenson, R., Ubukata, H., Watkins, S., Wongsarnpigoon, I., & Yarwood, A. (2022). Reframing self-access: Reviewing the literature and updating a mission statement for a new era. *Studies in Self-Access Learning Journal*, 13(1), 31–59. https://doi.org/10.37237/130103
- Mynard, J., & Carson, L. (Eds.). (2012). Advising in language learning: Dialogue, tools and context. Pearson.
- Mynard, J., & Shelton-Strong, S. J. (2020). Investigating the autonomy-supportive nature of a self-access environment: A self-determination theory approach. In J. Mynard, M. Tamala, & W. Peeters (Eds.), Supporting learners and educators in developing language learner autonomy (pp. 77–117). Candlin & Mynard.
- Mynard, J. & Shelton-Strong, S.J. (Eds.), (2022a). Autonomy support beyond the language learning classroom: A self-determination theory perspective. Multilingual Matters
- Mynard, J., & Shelton-Strong, S. J. (2022b). Self-Determination Theory: A proposed framework for self-access language learning. *Journal for the Psychology of Language Learning*, 4(1), 1–14. https://doi.org/10.52598/jpll/4/1/5
- Noels, K. A., Lou, N. M., Lascano, D. I. V., Chaffee, K. E., Dincer, A., Zhang, Y. S. D., & Zhang, X. (2019a). Self-determination and motivated engagement in language learning. In T. Lamb, K. Csizér, A. Henry, & S. Ryan (Eds.), The Palgrave handbook of motivation for language learning (pp. 95–115). Palgrave Macmillan.
- Noels, K. A., Adrian-Taylor, S., Saumure, K., & Katz, J. W. (2019b). Motivation and the support of significant others across language learning contexts. *Journal for the Psychology of Language Learning*, 1(1), 106–141. (http://www.iapll.com/journal).
- Noels, K. A. (2023). Self-determination theory and language learning. In R. M. Ryan (Ed.), The Oxford handbook for self-determination theory (pp. 619–637). Oxford University Press.
- Ntoumanis, N. (2023). The bright, dark, and dim light colors of motivation: Advances in conceptualization and measurement from a self-determination theory perspective. In A. J. Elliot (Ed.), Advances in motivation science, 10 pp. 37–72). Elsevier. https://doi.org/10.1016/bs.adms.2022.11.002.
- Oga-Baldwin, Q. W. L. (2022). The quality of our connections matters: Relationships motivation theory in independent language learning. In J. Mynard, & S. J. Shelton-Strong (Eds.), Autonomy support beyond the language learning classroom: A self-determination theory perspective (pp. 149–163). Multilingual Matters.
- Oga-Baldwin, W. Q., Nakata, Y., Parker, P., & Ryan, R. M. (2017). Motivating young language learners: A longitudinal model of self-determined motivation in elementary school foreign language classes. *Contemporary Educational Psychology*, 49, 140–150. https://doi.org/10.1016/j.cedpsych.2017.01.010
- Oxford, R. L. (2016). Toward a psychology of well-being for language learners: The 'EMPATHICS' vision. In P. D. MacIntyre, T. Gregersen, & S. Mercer (Eds.), Positive psychology in second language acquisition (pp. 10–87). Multilingual Matters.

 Reeve, J. (2009). Why teachers adopt a controlling motivating style toward students and how they can become more autonomy supportive. Educational Psychologist,
- 44(3), 159–175. https://doi.org/10.1080/00461520903028990
 Reeve, J. (2016). Autonomy-supportive teaching: What is it, how to do it. In W. C. Liu, J. C. Keng Wang, & R. M. Ryan (Eds.), Building autonomous learners: Perspectives
- Reeve, J. (2016). Autonomy-supportive teaching: What is it, how to do it. In W. C. Liu, J. C. Keng Wang, & R. M. Ryan (Eds.), Building autonomous learners: Perspectives from research and practice using self-determination theory (pp. 129–152). Springer.
- Reeve, J. (2022a). A brief but comprehensive overview of self-determination theory. In J. Mynard, & S. J. Shelton-Strong (Eds.), Autonomy support beyond the language learning classroom: A self-determination theory perspective (pp. 13–30). Multilingual Matters.
- Reeve, J. (2022b). What it means to 'take ownership over one's own learning' in a self-determination theory analysis. In J. Mynard, & S. J. Shelton-Strong (Eds.), Autonomy support beyond the language learning classroom: A self-determination theory perspective (pp. 31–43). Multilingual Matters.
- Reeve, J. (2023). Cognitive evaluation theory: The seedling that keeps self-determination theory growing. In M. R. Ryan (Ed.), The Oxford handbook of self-determination theory (pp. 33–52). Oxford University Press.
- Reeve, J., & Cheon, S. H. (2021). Autonomy-supportive teaching: Its malleability, benefits, and potential to improve educational practice. *Educational Psychologist*, 56 (1), 54–77. https://doi.org/10.1080/00461520.2020.1862657
- Reeve, J., & Cheon, S. H. (2024). Learning how to become an autonomy-supportive teacher begins with perspective taking: A randomized control trial and model test. Teaching and Teacher Education, 148. https://doi.org/10.1016/j.tate.2024.104702
- Reeve, J., Jang, H. R., Cheon, S. H., Moss, J. D., Ko, H. R., & Jang, H. (2023). Extending self-determination theory's dual-process model to a new tripartite model to explain diminished functioning. *Motivation and Emotion*, 47(5), 691–710. https://doi.org/10.1007/s11031-023-10019-0
- Reeve, J., Ryan, M.R., Cheon, S.H., Matos, L., & Kaplan, H. (2022). Supporting students' motivation: Strategies for success. Routledge.
- Rogers, C. (1951). Client-centred therapy: Its current practice, implications and theory. Houghton Mifflin.
- Rogers, J. (2012). Coaching skills: A handbook (3rd ed). McGraw-Hill Education.
- Ryan, R.M. (Ed.) (2023). The Oxford handbook for self-determination theory. Oxford University Press.
- Ryan, R. M. (1995). Psychological needs and the facilitation of integrative processes. *Journal of Personality*, 63(3), 397–427. https://doi:10.1111/j.1467-6494.1995.
- Ryan, R.M. & Deci, E.L. (2017). Self-determination theory: Basic psychological needs in motivation, development and wellness. The Guilford Press.
- Ryan, R. M., & Deci, E. L. (2019a). Brick by brick: The origins, development, and future of self- determination theory. In A. J. Elliot (Ed.), Advances in motivation science, 6 pp. 111–156). Elsevier. https://doi.org/10.1016/bs.adms.2019.01.001.
- Ryan, R. M., & Deci, E. L. (2019b). Supporting autonomy, competence, and relatedness: The coaching process from a self-determination theory perspective. In P. Brownell, S. English, & J. Sabatine (Eds.), *Professional coaching: Principles and practice* (pp. 231–246). Springer.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68–78. https://doi.org/10.1037/0003-066x.55.1.68
- Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self- determination theory perspective: Definitions, theory, practices, and future directions. Contemporary Educational Psychology, 61, 1–11. https://doi.org/10.1016/j.cedpsych.2020.101860
- Ryan, R. M., Deci, E. L., Vansteenkiste, M., & Soenens, B. (2021). Building a science of motivated persons: Self-determination theory's empirical approach to human experience and the regulation of behavior. *Motivation Science*, 7(2), 97–110. https://doi.org/10.1037/mot0000194
- Ryan, R. M., Lynch, M. F., Vansteenkiste, M., & Deci, E. L. (2011). Motivation and autonomy in counseling, psychotherapy, and behavior change: A look at theory and practice. *The Counseling Psychologist*, 39(2), 193–260. https://doi.org/10.1177/0011000009359313
- Ryan, R. M., & Vansteenkiste, M. (2023). Self-determination theory: Metatheory, methods, and meaning. In R. M. Ryan (Ed.), The Oxford handbook of self-determination theory (pp. 3–30). Oxford University Press.
- Ryan, R. M., Reeve, J., Kaplan, H., Matos, L., & Cheon, S.-C. (2023). Education as flourishing: Self-determination theory is schools as they are and as they might be. In R. M. Ryan (Ed.), *The Oxford handbook of self-determination theory* (pp. 591–618). Oxford University Press.
- Sheldon, K. M. (2018). Understanding the good life: Eudaimonic living involves well-doing, not well-being. In J. P. Forgas, & R. F. Baumeister (Eds.), *The Social Psychology of Living Well* (pp. 116–136). New York: Routledge.
- Sheldon, K. M., & Holberg, E. A. (2023). Using free will wisely: The importance of self-concordant goal pursuit. Advances in Motivation Science, 10. https://doi.org/
- Shelton-Strong, S. J. (2020). Advising in language learning and the support of learners' basic psychological needs: A self-determination theory perspective. Language Teaching Research, 26(5), 963–985. https://doi.org/10.1177/1362168820912355
- Shelton-Strong, S. J. (2022). Sustaining language learner well-being and flourishing: A mixed-methods study exploring advising in language learning and basic psychological need support. *Psychology of Language and Communication*, 26(1), 415–449. https://doi.org/10.2478/plc-2022-0020
- Shelton-Strong, S. J., & Tassinari, M. G. (2022). Facilitating an autonomy- supportive learning climate: Advising in language learning and basic psychological needs. In J. Mynard, & S. J. Shelton-Strong (Eds.), Autonomy support beyond the language learning classroom: A self-determination theory perspective (pp. 185–205). Multilingual Matters.
- Shih, S.-S. (2019). An examination of academic coping and procrastination from the self-determination theory. *Perspective Journal of Education and Human Development*, 8(1), 57–68. https://doi.org/10.15640/jehd.v8n1a8
- Slemp, G. R., Field, J. G., Ryan, R. M., Forner, V. W., Van den Broeck, A., & Lewis, K. J. (2024). Interpersonal supports for basic psychological needs and their relations with motivation, well-being, and performance: A meta-analysis. *Journal of Personality and Social Psychology*. https://doi.org/10.1037/pspi0000459

- Sung, H.-C., Reeve, J., Jang, H.-R., Pink, M. A., Song, Y.-G., & Im, C.-H. (2024). Autonomy-supportive teaching leads to autonomy-supportive parenting: A teacher-to-parent relationship spillover effect. *Teaching and Teacher Education*, 144. https://doi.org/10.1016/j.tate.2024.104548
- Tassinari, M. G. (2016). Emotions and feelings in language advising discourse. In C. Gkonou, D. Tatzl, & S. Mercer (Eds.), New Directions in Language Learning Psychology (pp. 71–96). Springer.
- Teixeira, P. J., Marques, M. M., Silva, M. N., Brunet, J., Duda, J. L., Haerens, L., La Guardia, J., Lindwall, M., Lonsdale, C., Markland, D., Michie, S., Moller, A. C., Ntoumanis, N., Patrick, H., Reeve, J., Ryan, R. M., Sebire, S. J., Standage, M., Vansteenkiste, M., & Hagger, M. S. (2020). A classification of motivation and behavior change techniques used in self-determination theory-based interventions in health contexts. *Motivation Science*, 6(4), 438–455. https://doi.org/10.1037/
- Vansteenkiste, M., Aelterman, N., De Muynck, G.-J., Haerens, L., Patall, E., & Reeve, J. (2018). Fostering personal meaning and self-relevance: A self-determination theory perspective on internalization. *The Journal of Experimental Education*, 86(1), 30–49. https://doi.org/10.1080/00220973.2017.1381067
- Vansteenkiste, M., Aelterman, N., Haerens, L., & Soenens, B. (2019). Seeking stability in stormy educational times: A need-based perspective on (de) motivating teaching grounded in self-determination theory. In E. N. Gonida, & M. S. Lemos (Eds.), *Motivation in education at a time of global change: theory, research, and implications for practice, 20* pp. 53–80). Emerald. https://doi.org/10.1108/S0749-74232019000020004.
- Vansteenkiste, M., & Ryan, R. M. (2013). On psychological growth and vulnerability: Basic psychological need satisfaction and need frustration as a unifying principle. Journal of Psychotherapy Integration, 23(3), 263–280. https://doi.org/10.1037/a0032359
- Vansteenkiste, M., Soenens, B., & Ryan, R. M. (2023). Basic psychological needs theory: A conceptual and empirical review of key criteria. In R. M. Ryan (Ed.), *The Oxford handbook of self-determination theory, pp. 84*–123. Oxford University Press.
- Vrijders, B., Weinstein, N., Paulmann, S., Soenens, B., Waterschoot, J., & Vansteenkiste, M. (2024). Your prosody matters! The effect of controlling tone of voice on listeners' experienced pressure, closeness, and intention to collaborate with the speaker. *Motivation Science*. https://doi.org/10.1037/mot0000357
- Vygotsky, L. (1978). Mind in society. The development of higher psychological processes. Harvard University Press.
- Willis, J.W. 2007. Foundations of qualitative research. Thousand Oaks: Sage.
- Wisniewski, T., White, C., Green, C., Elder, A. F., Sohel, S., Perry, N. E., & Shapka, J. D. (2018). Supporting students through role redefinition: A self-determination theory perspective. *Education as Change*, 22(1). https://doi.org/10.25159/1947-9417/3700