

A Systematic Review Investigating the Impact of Academic Advising on Undergraduate Nursing Students' Self-Determination

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Abstract

Academic advising is a vital component of higher education, promoting student engagement, success, and the attainment of learning outcomes. While its positive impact on academic performance, retention, and student development is well documented, limited research explores its influence on nursing students' self-determination. This systematic literature review (SLR) applies Deci and Ryan's Self-Determination Theory (SDT) to examine the historical context and key factors contributing to effective academic advising in nursing education. Using a transparent and replicable SLR process, 20 empirical studies were analyzed from databases such as PsycINFO, ERIC, and Academic Search Complete. Of these, 8 were highly referenced, 7 were moderately referenced, and 5 were lowly referenced based on methodological rigor. SDT therefore offers a compelling lens through which to understand how autonomy-supportive advising practices in nursing education promote motivation and persistence by supporting decision making in complex clinical pathways, reinforcing self-efficacy through academic skills-based feedback, and building a supportive advisor-student relationship. The following themes emerged from SLR: autonomy support, competency development, and relational engagement and support. Search process was limited to indexed journals available through the authors' university library system that were peer-reviewed and published articles written in the English language between 2005 and 2025. Future reviews should consider expanding inclusion criteria to incorporate non-English and gray literature sources to achieve a more comprehensive and globally representative understanding of advising practices in nursing education, which involve the high-pressure nature of clinical training.

Keywords: Systematic literature review, academic advising, undergraduate nursing students, self-determination

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Introduction

Academic advising is a vital educational process that connects students with learning opportunities, fostering engagement, success, and the achievement of key learning outcomes (McGill & Seiden, 2023). Harrison (2009)

highlights the significant impact of effective academic advising on both individual students and institutional structures. Quality advising helps students set and attain academic goals, supports personal and professional growth, and guides them in making informed decisions about their educational journey (Duslak et al., 2023). By fostering a supportive advising environment, institutions can enhance retention rates, academic performance, and student satisfaction, while also improving their overall reputation and effectiveness (Aziante et al., 2021).

According to Glennen (1975), the evolution of academic advising highlights a shift toward a holistic approach that supports not only students' academic success but also their professional and personal development. Research by Duslak et al. (2023), Pace (2023), and Smith & Allen (2006) demonstrates how advising has transformed from a faculty-driven responsibility into a comprehensive, student-centered process that addresses the needs of the whole student.

Hande et al. (2017) emphasize that the integration of both practical and theoretical components in nursing education makes academic advising especially crucial. Given the intense clinical and academic demands, nursing students seek advising more frequently than their peers in non-practice-based disciplines (Bourbonnais et al., 2008). This increased need likely arises from the challenge of balancing hands-on clinical experience with rigorous coursework. Academic advisors in nursing programs play a vital role in academic planning, guiding students through the pressures of clinical practice, licensure preparation, and overall professional development. The holistic advising model is particularly essential in nursing, where students must cultivate not only technical expertise but also emotional intelligence to thrive in their field.

Rezakhani et al. (2020) identify key external factors that can hinder nursing students' learning experiences, including unsuitable social standards, poor organizational culture, and resource shortages. These challenges can shape students' perceptions of nursing staff and have an impact on their overall educational journey, making it more difficult to bridge the gap between theory and practice. Such obstacles underscore the importance of a robust advising system that not only fosters academic progress but also aids students in navigating the broader institutional and social factors that influence their learning (Duslak & McGill, 2018; Gallo & McGill, 2023; Kuhn, 2008).

Alvarado and Olson (2020) further emphasize that academic advising is an interactive process in which advisors play a crucial role in helping students identify, develop, and achieve their personal and professional goals. This relationship is especially critical in the nursing field, where students encounter unique pressures and require guidance in multiple areas, including academic performance, clinical requirements, and career preparation. Harrison (2009) acknowledges that while faculty play a crucial role in advising relationships, much of the research on the advisor-advisee dynamic falls within the domain of educational and pedagogical scholarship. Within this context, faculty advising can be structured to address diverse learner needs, guide students in making informed academic and career decisions, and foster productive, supportive relationships that empower students to succeed both academically and personally.

The lack of empirical evidence in prior research presents an opportunity to explore how advising models, such as appreciative advising, can be applied across disciplines, including practice-based fields like nursing and technical programs, where deeper engagement from advisors is essential. Nursing, a profession with rigorous standards, high-stakes clinical competencies, and specialized qualifications, places significant pressure on students to excel not only in theoretical coursework but also in practical assessments and standardized testing. Moreover, the emotional and psychological demands associated with preparing for a healthcare career intensify the need for holistic academic support.

Traditional advising models often fail to address the complex, multifaceted needs of students in such programs, where success hinges on both academic performance and the development of professional identity and resilience. Proactive advising, grounded in positive psychology and student-centered engagement, holds promise for fostering a supportive advising relationship that nurtures students' strengths, encourages reflective goal setting, and enhances motivation. Specifically, for nursing students, effective advising should extend beyond course selection to include mentoring that cultivates self-awareness, confidence, and a strong sense of purpose. When advisors intentionally support students' basic psychological needs for autonomy, competence, and relatedness, as outlined by self-determination theory, they help students internalize motivation and become more self-directed learners. This is especially critical in practice-based disciplines, where students must navigate high-pressure environments, ethical decision-making, and continuous learning. Therefore, exploring how proactive advising can be systematically integrated into advising frameworks within nursing programs is vital for enhancing student success, retention, and well-being.

This study aims to conduct a systematic literature review to answer the following research questions:

1. What is the historical context of academic advising?
2. What are the main factors that contribute to a successful advising experience for nursing school students?
3. In what context was self-determination theory empirically investigated among nursing students?

Purpose of Systematic Literature Review

The purpose of a systematic literature review is to methodically identify, appraise, and synthesize existing research-based evidence on a specific topic using transparent and replicable procedures. Unlike traditional literature reviews, systematic reviews aim to minimize bias by applying explicit inclusion and exclusion criteria and following a structured protocol for data collection and analysis (Booth, Sutton, & Papaioannou, 2016). In the context of this study, the systematic literature review aims to explore the historical development and current practices of academic advising in nursing education, with a particular focus on how advising supports student outcomes in undergraduate nursing programs. It also examines the empirical application of Self-Determination Theory (SDT) among nursing students to understand how psychological needs (autonomy, competence, and relatedness) are supported through advising practices (Deci & Ryan, 2000). Findings reveal that academic advising is a globally researched topic across various contexts, with SDT providing a strong framework for understanding how autonomy, competence, and relatedness, which are the core components of SDT known to enhance intrinsic motivation, academic resilience, and persistence.

This focus is particularly timely, given the global shortage of healthcare workers, which has prompted the expansion of nursing programs to address workforce demands (Boniol et al., 2022). This remains a significant challenge for many nations, particularly amid the growing demands for healthcare worldwide (Jacobsen, 2022). In response, various nursing programs (undergraduate) have emerged as an innovative solution to address this workforce gap. As described by Graebe et al. (2022), these programs enable individuals with undergraduate degrees in other disciplines to transition swiftly into nursing, offering a fast-track path to licensure by building on prior learning experiences.

To navigate these demands successfully, students require strong academic support, particularly through proactive academic advising (Glennen, 1975). This advising approach ensures that students receive critical guidance and resources before they even request them, helping them effectively manage their workload while maintaining high academic standards.

Nursing, as a high-stakes profession with rigorous academic requirements, places significant emphasis on students' success in standardized licensure exams (Snyder, 2018). Within this demanding context, appropriate training and effective academic advising are essential. Advising that fosters autonomous motivation and supports self-determination is particularly valuable, as it empowers students to take ownership of their learning while building the confidence and competence needed to excel.

The purpose of this SLR is to systematically examine and synthesize existing research on the impact of academic advising on undergraduate students' self-determination in nursing programs. This systematic literature review (SLR) will include only empirical studies that investigate the relationship between academic advising and students' self-determination in nursing programs, excluding studies primarily focused on general advising, model development, or testing measurement instruments.

While general academic advising models, such as developmental, prescriptive, and appreciative advising (Crookston, 1972; O'Banion, 1972; Bloom, Hutson, & He, 2008), offer valuable structures for guiding students, they often fall short in addressing the underlying psychological needs that drive student motivation and persistence. These traditional models tend to emphasize logistical support (e.g., course selection, academic planning) or interpersonal rapport, without explicitly aligning with theoretical frameworks that explain how motivation is developed and sustained. In contrast, advising practices grounded in Self-Determination Theory (SDT) focus on fostering students' intrinsic motivation by supporting their basic psychological needs for autonomy, competence, and relatedness. SDT-aligned advising goes beyond procedural guidance to promote students' ownership of learning, academic resilience, and long-term engagement.

Despite the growing recognition of SDT in educational research, there remains a significant gap in its application within academic advising, particularly in practice-based and high-pressure disciplines like nursing. The existing literature largely overlooks how advising strategies can be intentionally designed or evaluated through the lens of SDT, particularly in the context of nursing, a discipline marked by intensive curricula, emotional stress, and high accountability for licensure outcomes. Few empirical studies (Perlman, 2022; Messineo, L., 2019, & Lee, S., et al., 2019) explicitly examine how advising can be tailored to meet nursing students' basic psychological needs, leaving a significant theoretical and practical gap. This systematic review addresses that gap by synthesizing

empirical studies that connect academic advising practices with the support of self-determination among undergraduate nursing students. By focusing on a population with distinct academic pressures and professional demands, this review highlights how SDT can serve as a valuable framework for developing more effective, motivationally supportive advising practices in nursing education.

Conceptual Framework

Figure 1 presents a conceptual framework that applies Self-Determination Theory (SDT), developed by Deci and Ryan (1985), to the academic advising context. SDT posits that human motivation is driven by the fulfillment of three basic psychological needs: autonomy, competence, and relatedness. In the context of academic advising, these needs are operationalized through intentional advisor-student interactions designed to foster a supportive and motivating environment for students.

Autonomy support in advising involves allowing students to make choices aligned with their interests and goals, encouraging self-initiation, and acknowledging students' perspectives. Advisors promote autonomy by providing opportunities for self-directed decision-making and reducing external pressures.

Competence support refers to helping students develop the skills and confidence needed to succeed academically. Advisors offer clear guidance, feedback, and encouragement, helping students set achievable goals and recognize their progress.

Relatedness is facilitated when advisors create a caring, respectful, and empathetic advising relationship. A sense of belonging and connection enhances students' trust in their advisor and the institution, promoting sustained engagement.

When academic advisors intentionally support these three psychological needs, students are more likely to experience enhanced motivation, self-determination, and positive academic outcomes, including improved retention, academic achievement, and overall satisfaction.

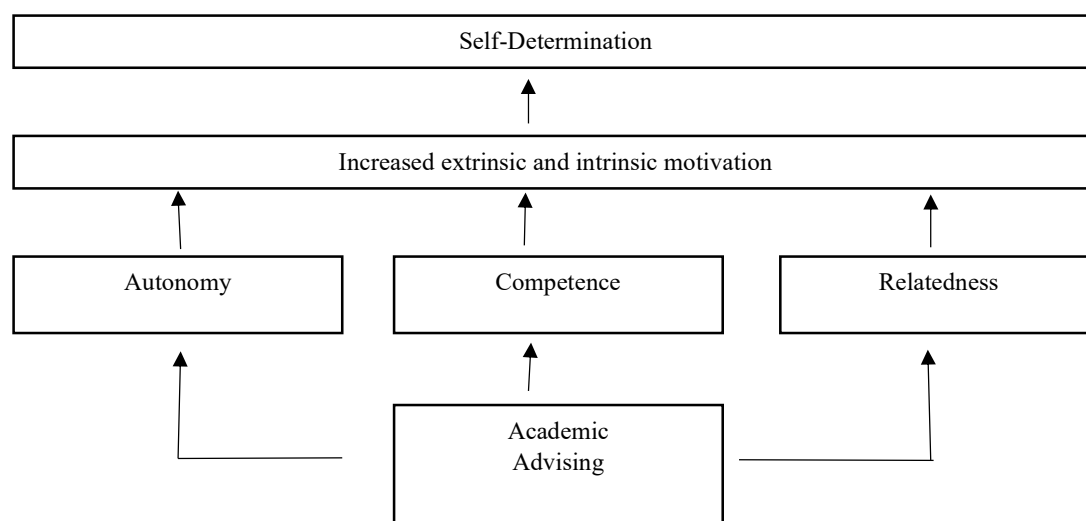


Figure 1. *Self-Determination Theory Applied to Academic Advising Diagram*

Note: Figure language adopted from Deci and Ryan (1985).

This paper began by examining the historical development of academic advising models such as prescriptive, developmental, and appreciative advising, by synthesizing how each aligns with or diverges from the principles of SDT. While prescriptive advising typically emphasizes directive support and administrative guidance, it often falls short in fostering student autonomy, a central tenet of SDT. Developmental advising, by contrast, aligns more closely with SDT by promoting student growth through collaborative goal setting and support for decision-making, thereby addressing autonomy and competence. Appreciative advising adds a relational component that resonates with SDT's focus on relatedness, but it may not explicitly target intrinsic motivation unless

intentionally structured. Next, we outlined the methodology used for selecting and reviewing the literature, detailing the search strategy, analysis, and quality assessment of the included studies. The research findings from the SLR of empirical studies on academic advising were then presented. Additionally, we discussed the methodological contributions of self-determination theory to the field of academic advising and highlighted its relevance in fostering student motivation and academic success. Following this synthesis, the paper outlined the systematic literature review methodology, including search strategies, inclusion criteria, and quality appraisal of the 20 empirical studies reviewed. The findings illustrate how academic advising practices can be optimized through SDT, and the paper concludes by emphasizing the theoretical and practical significance of SDT in advancing student motivation, academic engagement, and well-being in nursing education.

Academic advising in U.S. higher education has a long history, dating back to the early 19th century. Scholars such as Astin, Oseguera, Sax, and Korn (1997), Crookston (1972), Ender, Winston, and Miller (1982), and O'Banion (1972) have made significant contributions to understanding its evolution. Before the 1960s, academic advising followed a prescriptive model, where advisors acted as authoritative figures primarily responsible for providing students with course information and resolving academic concerns (Harris, 2018; Winston & Sandor, 1984).

By the 1970s, prescriptive advising had evolved into developmental advising, a model rooted in the work of Crookston (1972) and O'Banion (1972). This approach emphasized holistic student development, integrating academic, career, and personal growth through goal setting and decision-making. Crookston's model stressed the importance of advisor-student relationships in fostering self-awareness and independence. Developmental advising aligns with Vygotsky's (1978) theory of social constructivism, particularly the zone of proximal development (ZPD), which highlights the role of guidance in advancing student learning. Unlike prescriptive advising, developmental advising acknowledges student diversity, integrates academic and co-curricular experiences, and provides scaffolding for decision-making and problem-solving (Smith & Allen, 2006). It fosters an advisor-student partnership, where both actively participate in shaping the student's educational journey (Barbuto et al., 2011; Drake, 2011).

By the mid-1970s, proactive advising emerged, blending elements of both prescriptive and developmental advising (Glennen, 1976; Tinto, 1975). Pioneered by Robert Glennen (1975), proactive advising introduced structured, institution-driven interventions to support students, particularly those reluctant to seek help independently. This approach focuses on building relationships with students while providing crucial academic guidance before they request it (Donaldson et al., 2016; Earl, 1988; Vander Schee, 2007). Proactive advising fosters student engagement and persistence by integrating timely support with personalized academic planning (Kitchen, Cole, Rivera, & Hallett, 2021). Di Maria (2006) highlights that active student engagement in college life significantly increases retention rates. Proactive advising plays a key role in fostering these connections by serving as a bridge between students and their institutions. Through proactive outreach, advisors help students identify potential obstacles, develop strategies to overcome them, and set both short- and long-term academic goals. Additionally, early alert systems and other intervention strategies help institutions identify at-risk students and provide timely, supportive solutions to promote their success.

Self-Determination Theory

Although institutions of higher education are increasingly adopting academic advising, there is still a research gap concerning its impact on nursing students' self-determination. This systematic literature review (SLR) will apply Deci and Ryan's (1985) Self-Determination Theory (SDT) framework to explore the historical context of academic advising and the main factors that contribute to a successful advising experience. SDT provides a framework for understanding how advisors can support students in recognizing the importance of their fundamental psychological needs of relatedness, competence, and autonomy in shaping both intrinsic and extrinsic motivation. According to SDT, individuals are motivated by the desire to experience psychological growth and mastery, but achieving this requires a supportive environment (Ryan & Deci, 2017, 2020). Research by Ryan and Deci (2020) suggests that positive outcomes across various educational levels and cultural contexts are significantly enhanced when students' psychological needs for autonomy, competence, and relatedness are met.

In SDT, three fundamental psychological needs are critical to motivation: autonomy, competence, and relatedness. Autonomy refers to the feeling of control and ownership over one's decisions and actions (Ryan & Deci, 2020). Advisors foster autonomy by offering self-directed opportunities during advising sessions (Howard et al., 2021). The need for autonomy is satisfied when students perceive their activities as self-endorsed or congruent with their sense of self. The stronger a student's autonomy in motivation, the more likely they are to

experience positive affective, cognitive, and behavioral outcomes (Deci & Ryan, 1991). Students are most autonomously motivated when their goals and decisions are self-generated and freely chosen rather than influenced by external pressures (Hope, 2019).

Competence, the second key need, involves feeling effective and capable when interacting with one's environment. This need is associated with mastery, challenge, and self-efficacy (Shelton-Strong, 2020). Students must have confidence in their abilities and believe they can succeed academically (Erlich & Russ-Eft, 2013; Martinez & Elue, 2020; Young-Jones et al., 2013). SDT posits that social-contextual factors, such as feedback and rewards, enhance students' sense of competence and intrinsic motivation by fostering a belief in their ability to achieve desired outcomes.

Relatedness is the third need, referring to the desire to feel connected to others (Ryan & Deci, 2000, 2020). The research highlights the significance of students' feelings connected to their peers, college, and advisors, which has a positive impact on academic success (Guiffreda et al., 2013; Hatch & Garcia, 2017; Johnson et al., 2016). The satisfaction of these three psychological needs enhances both intrinsic and extrinsic motivation, encouraging students to pursue academic goals, engage deeply with learning, and develop a sense of belonging and purpose in their educational journey.

Studies show that students who are motivated both intrinsically and extrinsically are more likely to achieve their goals (Burt et al., 2013; Donaldson et al., 2016; Mertes, 2016). Donaldson et al. (2020) explored developmental advising, which focuses on students' personal growth beyond academic performance. Their findings indicate that students value this approach because it addresses their unique needs and aspirations, fostering a sense of belonging and purpose. Advisors, in turn, appreciated developmental advising for building trust-based relationships with students. Similarly, Museums and Ravello (2021) found that developmental advising, especially for minority and underrepresented students, helps bridge communication gaps and empowers students by providing a sense of connection and support, ultimately increasing engagement and reducing marginalization. Strawn and Littlepage (2021) also highlighted that developmental advising leads to higher student engagement and persistence by encouraging proactive behaviors and greater involvement in campus resources and activities.

Research by Barnes et al. (2010) identified positive advisor attributes, including accessibility, helpfulness, sociability, and care, all of which have a positive impact on student success. This study aligns with Deci and Ryan's (1985) argument that autonomy, competence, and relatedness are the foundation of self-determination. These elements inform the research questions of this study, which aims to explore how academic advising influences the self-determination of nursing students.

Nursing education, which integrates classroom learning with real-world patient care, presents a unique dynamic for students. Shellenbarger and Hoffman (2016) emphasized the complexity of this dual role, which requires nursing students to apply theoretical knowledge in clinical settings. Effective academic advising plays a critical role in helping students navigate these challenges. The limited research on academic advising within nursing education, as noted by Harrison (2009), highlights the need for further exploration.

Filson and Whittington (2013) argued that active engagement from academic advisors is essential for students to succeed in the program. Burt et al. (2013) also emphasized the importance of emotional support, noting that students who feel valued and supported by advisors are more likely to remain engaged and motivated. Advisors who offer logistical support help students manage their responsibilities, especially when balancing academic and clinical duties (Harrison & Leonard, 2020). Effective advisors help students navigate time management, clinical requirements, and work-life balance (Burt et al., 2013; Harrison & Leonard, 2020).

According to Park and Ko (2021), effective academic advising requires personalized approaches, clear communication, and proactive support. Advisors who engage in this way can help students take ownership of their educational journey, leading to positive outcomes and successful program completion. Research indicates that allowing students to make decisions fosters autonomy and responsibility, both of which are crucial for academic success (Donaldson et al., 2016; Guiffreda et al., 2013). When students actively participate in goal setting and educational planning, they are more likely to find meaning and relevance in their choices, thereby enhancing motivation to continue their studies.

Levesque (2018) noted that students who fail to see the connection between their decisions and goals may become disengaged and potentially drop out. Therefore, academic advising promotes self-determination, clarity, and goal setting is crucial in keeping students on track. Studies consistently show that academic advising has a positive impact on students' sense of competence and overall academic performance (Burt et al., 2013; Donaldson et al., 2016; Mertes, 2016). This is particularly important in nursing education, where students face technical courses and dual academic and clinical demands that require ongoing support.

In nursing education, students often seek more meaningful connections with their advisors to address challenges related to time management, clinical placements, high-stakes assessments, and heavy workloads (Donaldson et al., 2016, 2020; Museus & Ravello, 2021). These relationships go beyond traditional advising, as students rely on advisors for guidance on academic matters as well as emotional and practical challenges in patient care and career preparation. Research consistently supports the need for academic advising that addresses students' basic psychological needs, autonomy, competence, and relatedness by creating a supportive environment that enhances motivation and promotes positive academic outcomes. This framework is particularly relevant in academic advising, where advisors play a pivotal role in fostering students' self-determination.

Appreciative advising offers a model in which advisors help students overcome challenges and achieve their academic goals by promoting autonomy and encouraging meaningful engagement with their personal and academic aspirations (Read, 2016). This approach shifts away from traditional, prescriptive advising and fosters collaboration between faculty and students in setting shared goals. Aligning with the principles of self-determination theory, appreciative advising empowers students to take ownership of their academic journey while fostering a supportive and engaging relationship with their advisors. By promoting mutual understanding and shared goals, appreciative advising enhances students' autonomy and relatedness, two critical elements for success.

Table 1.0. SDT-Based Advising Practices and Outcomes in Undergraduate Nursing Education

SDT Construct	Advising Practice	Description	Impact on Student Outcomes
Autonomy	Collaborative goal setting	Advisors work with students to co-create academic/career goals based on students' interests.	Increases student ownership, intrinsic motivation, and self-direction.
	Offering course/clinical rotation choices	Presenting multiple pathways and allowing students to choose based on their goals.	Promotes decision-making confidence and autonomy.
	Encouraging self-reflection	Guiding students to assess their learning styles, interests, and goals.	Fosters internal motivation and sense of personal agency.
	Student-led planning	Encouraging students to initiate and plan advising sessions.	Builds initiative and reinforces their role as active participants in their education.
Competence	Providing constructive feedback	Frequent, formative feedback on academic and clinical performance.	Enhances academic self-efficacy and mastery.
	Academic skills coaching	Study strategies, time management, and test preparation support.	Increases preparedness, reduces anxiety, and builds confidence.
	Monitoring progress/milestones	Tracking and celebrating the achievement of academic benchmarks.	Reinforces sense of growth and capability.
	Clarifying expectations	Providing transparent information about requirements and pathways.	Reduces confusion and promotes task engagement.
Relatedness	Personalized advising relationships	Advisor shows care, remembers student details, and listens attentively.	Builds trust, belonging, and emotional security.
	Proactive communication and outreach	Regular check-ins and messages that demonstrate advisor availability.	Enhance student retention and connection.
	Connecting to a broader support network	Referrals to peer mentors, faculty, and professional groups.	Fosters community support and academic integration.
	Inclusive, culturally responsive advising	Acknowledging and valuing diverse student backgrounds and experiences.	Increase engagement, especially for underrepresented groups.

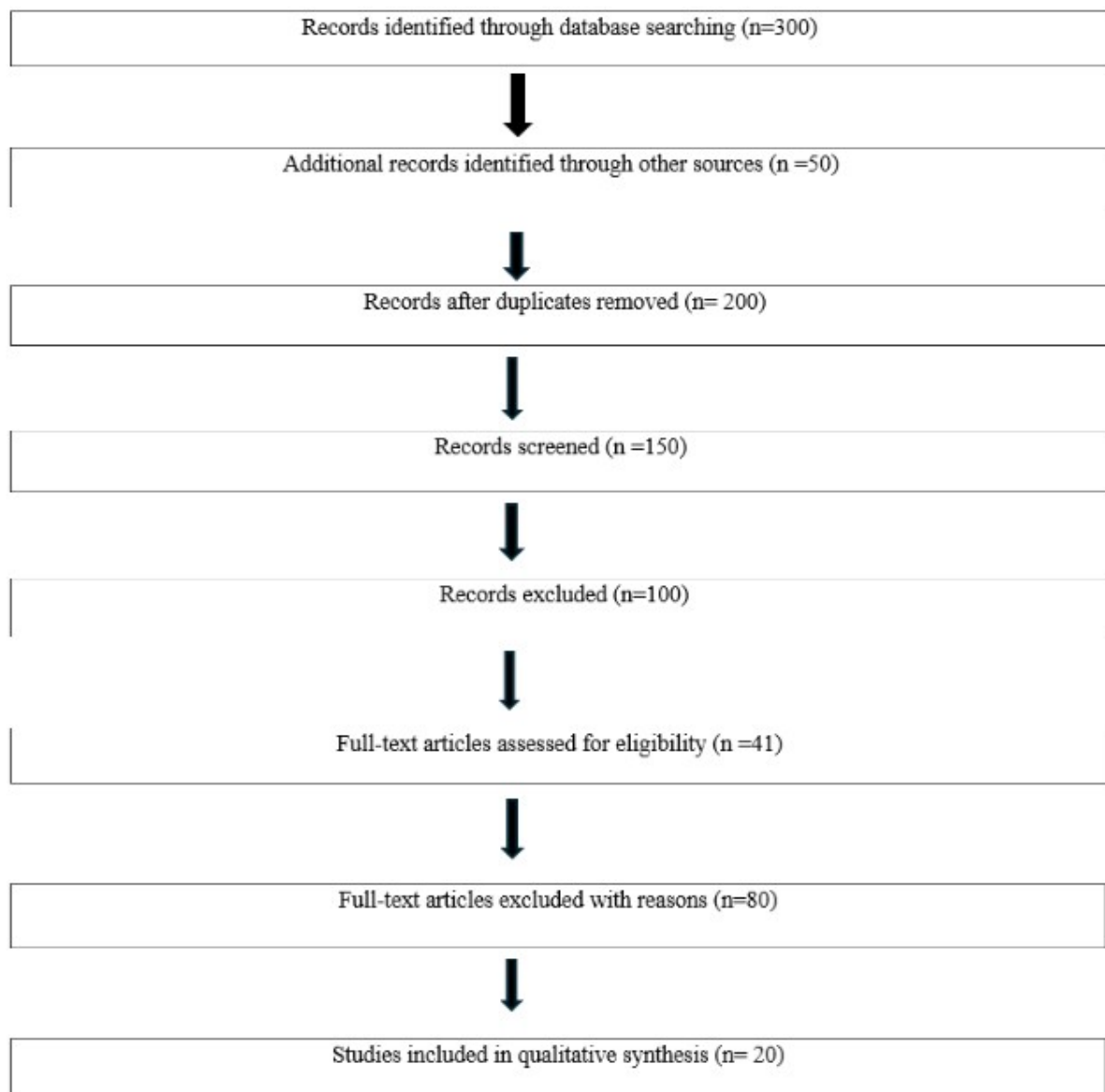


FIGURE 2: PRISMA Flow diagram

Methodology

Systematic Literature Reviews (SLRs) are distinct from traditional literature reviews due to their objective, replicable, and comprehensive nature. The process of conducting a systematic literature review (SLR) is similar to reporting empirical research, ensuring consistency and transparency (Weed, 2005). Initially developed in the medical, healthcare, and policy sectors, systematic literature reviews (SLRs) have been used to compile the best available evidence to inform clinical and policy decisions (Cook et al., 1997; Transfield et al., 2003). Klassen et al. (1998) define an SLR as a thorough review that involves a comprehensive search for relevant studies on a specific topic, followed by a structured appraisal and synthesis of the identified studies based on a predefined and explicit methodology. This SLR focused on research examining academic advising in organizational settings. Given that our objective is to understand the empirical investigation of academic advising and its impact

on students' self-determination, studies primarily focused on the development or testing of measurement instruments were excluded by the researchers. This review will employ an extensive search of relevant databases to ensure the literature reviewed is as pertinent as possible to the research questions. The following section will outline the search methods, inclusion and exclusion criteria, sample, and data analysis approach.

Search Methods

We identified published studies through systematic searches of electronic databases available via the authors' university library system. The databases included in this review are PsycINFO, ERIC, and Academic Search Complete, accessed through the EBSCO vendor platform. The search results were limited to English-language, peer-reviewed journal articles. These searches will be conducted systematically, following the order of the databases listed above.

Inclusion and Exclusion Criteria

The initial search required that articles included in the review meet the following criteria: (a) they must be published in a peer-reviewed journal; (b) they must be in the English language; and (c) they must include the keywords "academic advising" and "self-determination." No restrictions were placed on the year of publication. The number of articles containing these keywords retrieved from each database was recorded. We then checked for duplicates within the current database being searched and ensured that no articles from previously searched databases were included. We recorded the number of external duplicates, and any duplicate journal articles from the last database searched were deleted while maintaining a running total of new articles found.

Once all potential studies have been identified, a second screening will be conducted to assess eligibility against the inclusion criteria. The inclusion criteria for this second screening are as follows: (a) articles must be in the English language; (b) articles must be empirical studies (i.e., not essays, book reviews, letters, literature reviews, editorials, opinions, journalistic, or anecdotal articles); (c) the article must focus on academic advising as the central theme; and (d) the article must examine self-determination theory. Articles that do not meet all four of these specifications in their abstract, results, or discussion sections were excluded. Finally, additional articles meeting the inclusion criteria were identified by reviewing the bibliographies of resources found through the second screening.

Sample

At the first stage (350), Peer-reviewed publications were identified using the key search terms specified in the "Inclusion and Exclusion Criteria" section above. The total number of articles retrieved, along with the number of duplicates deleted, will be recorded. The final sample of articles (41) will consist of empirical, peer-reviewed studies selected from a range of peer-reviewed journals.

Data Analysis

The Matrix Method (Garrad, 1999) was employed as a strategy for organizing and abstracting relevant information from the selected publications. For this study, the following information will be extracted from each article: (a) the historical context of academic advising, (b) the main factors contributing to a successful advising experience for nursing school students, and (c) the context in which self-determination theory was empirically investigated among nursing students.

Additionally, the methodology used to examine academic advising in each publication was evaluated. The findings from this study were summarized and organized into matrices (i.e., tables). The SLR findings presented a synthesis of the results from all 20 empirical studies, accompanied by an assessment of each study's quality. Furthermore, we assess the level of supporting evidence for the thematic conclusions derived from combining the results of the multiple studies.

Results

Our SLR findings consist of a synthesis of the results from all 20 empirical studies, along with an assessment of quality for each study.

Table 2.0 Database and journals used in the study

	Journal	Count
PsycINFO	New Directions for Higher Education	1
PsycINFO	NACADA Journal	5
Eric	Tertiary Education and Management	2
Academic Search Complete	A comprehensive handbook.	3
Eric	NACADA Journal	1
Academic Search	ASEE Annual Conference & Exposition	1
Eric	NACADA Journal	1
Academic Search Complete	Inside Higher Ed	3
	New Directions for Community Colleges	2
Academic Search Complete	A comprehensive handbook	3
Eric	Journal of College Orientation, Transition, and Retention	1
PsycINFO	NACADA Journal	1
PsycINFO	Journal of Applied Psychology	3
Eric	International Journal of Leadership in Education	2
Eric	Alberta Journal of Education Research	1
PsycINFO	The International Journal of Human Resource Management.	1
Eric	Journal of Nursing Research	6
Eric		
Academic Search Complete	Egyptian Journal of Health Care	2
PsycINFO	Nurse Education Today	2
PsycINFO		
Eric		
PsycINFO	Journal of College Student Retention	1

Table 3.0. Classification and quality assessment of studies

I = High	II = Medium	III = Low
The study was focused and provided sufficient background to establish its significance.	The study was somewhat focused and provided some background to establish its significance.	The study lacked a clear focus and provided insufficient background to justify the research.
The research was well-planned, with appropriate methodology and the use of validated measures.	The research was somewhat planned, with appropriate methodology and the use of validated measures.	The planning appeared weak, and the methodology employed was inappropriate for addressing the research questions.
The participant sample was both adequate in size and relevant to the study's aims.	The participant sample was both adequate in size and relevant to the study's aims.	The measures used were not validated, and the sample was both inadequate in size and not representative of the target population.
Data analysis was rigorous and employed appropriate statistical techniques, and the findings were clearly articulated.	Data analysis was good and employed appropriate statistical techniques, and the findings were somewhat articulated.	Data analysis lacked rigor, with insufficient or inappropriate statistical techniques, and the findings were presented unclearly.

Overall, this review provides an in-depth analysis of why academic advising is being researched across various contexts, cultures, and disciplines. The antecedent sample consisted of 20 studies, all of which empirically examined the context of academic advising, and the following themes were discussed.

Theme 1: Autonomy Support

Across multiple studies, autonomy-supportive advising was identified as central to fostering student self-direction and motivation. Practices such as collaborative goal setting, offering academic choices, and encouraging reflective dialogue emerged as core mechanisms through which students gained a sense of ownership over their educational journeys (Donaldson et al., 2016; Hope, 2019).

High-quality studies (e.g., Museums & Ravello, 2021) consistently showed that when advisors respected students' individual goals and created space for independent decision-making, students were more engaged and exhibited stronger intrinsic motivation.

Lower-quality studies often acknowledged the importance of autonomy but lacked robust methodology or evidence to support causal links.

This theme confirms SDT's proposition that when learners feel their actions are self-endorsed, they are more likely to persist and succeed (Ryan & Deci, 2020).

Theme 2: Competence Development

Another prominent theme was the role of advising in enhancing students' academic and professional competence. Effective advising practices included regular, constructive feedback, academic coaching, and helping students track progress toward key milestones. These practices supported the development of self-efficacy, a known precursor to competence and achievement.

Studies by Shelton-Strong (2020) and Martinez & Elue (2020) showed how advisors who emphasized skill-building and clear communication helped reduce anxiety and improve academic performance. Medium-quality studies revealed moderate support for this theme but lacked longitudinal evidence. This theme aligns with SDT's assertion that competence is a key driver of motivation and persistence when students feel effective in navigating challenges.

Theme 3: Relational Engagement and Support

Relatedness, the need to feel connected and valued, was found to be especially critical for nursing students, who often navigate high-stakes academic and clinical environments. High-impact advising was characterized by trust-

building, personalized communication, and inclusive, culturally responsive approaches (Museus & Ravello, 2021; Donaldson et al., 2020). Studies consistently demonstrated that relational advising improved students' emotional security, retention, and sense of belonging, especially among underrepresented groups. Several lower-quality studies lacked contextual depth or failed to disaggregate findings by demographic groups, limiting their explanatory power.

This theme emphasizes the importance of creating emotionally supportive environments that fulfill students' need for belonging, a key condition for effective learning under SDT. The thematic synthesis highlights that effective academic advising aligns strongly with the tenets of SDT, particularly when it fosters autonomy, competence, and relatedness. The review reveals a growing global interest in the role of advising but underscores the need for more rigorous, diverse, and theory-driven research, especially in nursing education. Thus, this review illustrates that academic advising is being explored, and the topic has an international appeal. In the studies examining the factors contributing to successful advising, eight were classified as high quality, seven as medium quality, and five as low quality. Conclusive statements were made based on the synthesis of findings from each article.

Table 4.0. Summary of Sampled Studies' Specific Outcomes

Theme	Study (Example)	Advising Practice	Measured Outcome(s)	Key Finding
Autonomy Support	Donaldson et al. (2016)	Collaborative goal setting	Student engagement, motivation	Increased intrinsic motivation and participation
	Hope (2019)	Reflective dialogue	Persistence rates	Higher persistence among engaged students
	Museus & Ravello (2021)	Respect for student choice	Academic engagement	Strong correlation with self-directed learning
Competence Development	Shelton-Strong (2020)	Feedback and academic coaching	GPA, academic confidence	Improved GPA and reduced anxiety
	Martinez & Elue (2020)	Skill-building strategies	Academic performance	Better course outcomes and self-efficacy
Relational Engagement	Donaldson et al. (2020)	Personalized advising relationships	Retention rates, sense of belonging	Increased retention, especially for minority students
	Museus & Ravello (2021)	Culturally responsive advising	Belonging, student satisfaction	Stronger emotional connection and persistence

Note: Only sampled studies are included in this table for simplicity

Discussion

The following discussion of our findings is organized around the three central research questions.

What is the historical context of academic advising?

Academic advising was introduced to readers by authors of empirical studies, citing one or all of the following: Harris (2018), Winston & Sandor (1984), Crookston (1972), and O'Banion. Generally, authors described academic advising by quoting one of these three authors in addition to citing multiple other authors, including, but not limited to, Harris (2018) and Winston & Sandor (1984), Crookston (1972) and O'Banion (Barbuto et al., 2011; Drake, 2011; Smith & Allen, 2006). Among these foundational contributors, three are most highlighted for shaping the conceptual understanding of academic advising: Winston and Sandor (1984), Crookston (1972), and O'Banion. Each of these scholars reflects a different stage in the evolution of advising. Crookston (1972), for example, introduced the idea of "developmental advising," which reframed advising as a collaborative and educational process rather than a purely administrative task. This marked a significant departure from earlier prescriptive models and aligned advising with broader educational goals such as student growth and decision-making skills.

Building on this developmental perspective, O'Banion proposed a more structured model that outlined specific dimensions of the advising process, including exploration of life goals, vocational goals, and academic plans. His work emphasized the holistic nature of advising, suggesting that effective advising must consider the whole student rather than just academic requirements. Winston and Sandor (1984) further contributed by helping to formalize advising as a professional field, offering clearer definitions and frameworks that supported its institutionalization within higher education. Together, these scholars illustrate how academic advising evolved from a transactional activity into a comprehensive, student-centered practice. By repeatedly citing these foundational works, contemporary researchers both acknowledge the historical roots of advising and demonstrate how current practices are informed by decades of theoretical development and empirical study.

What are the main factors that contribute to a successful advising experience for nursing school students?

A growing body of research (2015-2025) highlights several critical factors that contribute to successful academic advising. Crookston (1972) pioneered the concept of developmental advising, emphasizing the advisor's role in facilitating students' holistic growth academically, personally, and professionally. This developmental approach contrasts with prescriptive advising by promoting shared responsibility and student engagement in decision-making. Further reinforcing this, Schlosser et al. (2003) and Hughey (2011) found that high-quality advisor-student relationships, grounded in trust, empathy, and open communication, significantly predict student satisfaction and retention.

Moore et al. (2024) introduced the concept of knowledge-based advising, showing that when advisors tailor their guidance using discipline-specific knowledge and student-centered approaches, students experience increased academic self-concept and decreased amotivation. This highlights the importance of advisor expertise and personalized support. In a related model, Earl (1988) and Varney (2007) advocated proactive (or intrusive) advising, in which advisors reach out to students before problems arise, thereby fostering accountability and improving academic outcomes.

Grounded in self-determination theory (Deci & Ryan, 1985, 2000), studies by Barker et al. (2015) and Young-Jones et al. (2013) confirmed that advising effectiveness is enhanced when advisors support students' basic psychological needs for autonomy, competence, and relatedness. These elements foster intrinsic motivation and positively influence academic success. Furthermore, Robbins (2012) emphasized that frequent and clear communication between advisors and students improves advising satisfaction and academic performance. Lastly, Kuhn, Gordon, and Webber (2006) emphasized the importance of institutional support, training, and manageable advisor caseloads, highlighting that systemic factors are crucial for enabling advisors to succeed.

In what context was self-determination theory empirically investigated among nursing students?

Twelve empirical studies explored self-determination theory among nursing students. Overall, these studies found that Self-Determination Theory (SDT; Deci & Ryan, 1985, 2000) has been widely applied in nursing education to explore how the fulfillment of students' basic psychological needs, autonomy, competence, and relatedness, influences academic and clinical outcomes. Research consistently demonstrates that autonomy-supportive learning environments enhance nursing students' intrinsic motivation, academic performance, and engagement. For instance, Kusrkar et al. (2013) and Olafsen et al. (2017) found that students who experience autonomy and relevance in their educational settings report greater persistence and satisfaction.

In clinical contexts, ten Cate et al. (2011) and Williams and Deci (1996) showed that when instructors support students' psychological needs, learners display greater clinical competence and motivation. In simulation-based learning, Liaw et al. (2016) demonstrated that autonomy-supportive simulations improve nursing students' perceived competence and enjoyment of learning tasks. More recently, Moore et al. (2024) examined the role of knowledge-based advising, finding that advisors who adopt student-centered, psychologically attuned practices can bolster students' academic self-concept and reduce amotivation, particularly by supporting students' sense of competence. Additionally, research by Orsini et al. (2016) and Cerasoli et al. (2014) suggests that satisfaction in educational contexts is associated with improved mental health and retention outcomes among nursing students. Collectively, these studies affirm that integrating Self-Determination Theory (SDT) into nursing education fosters not only better academic outcomes but also enhances well-being and professional development.

Limitations

In the studies included in this systematic review, where advising was most effective, academic advisors adopted a developmental or appreciative approach, fostering student autonomy through shared goal setting, reflective dialogue, and flexibility in educational pathways (Donaldson et al., 2020; Museums & Ravello, 2021). These practices directly support autonomy by enabling students to experience volition and ownership over their

learning trajectories. Similarly, competence was reinforced through frequent, actionable feedback, academic skills development, and transparent communication about expectations (Shelton-Strong, 2020). Relatedness was supported when advisors engaged in personalized, culturally responsive communication and built authentic, caring relationships with students (Guiffrida et al., 2013; Museus & Ravello, 2021).

However, a notable subset of the reviewed studies, particularly those categorized as low or medium quality, highlighted shortcomings in fully supporting SDT needs. Some advising models remained highly prescriptive or transactional, where advisors primarily provided course registration assistance without engaging students in meaningful dialogue or decision-making processes. These practices fell short of fostering autonomy and relatedness, often leading to passive student involvement and diminished motivation. In a few cases, null findings were reported where advising interventions did not yield measurable improvements in student engagement or self-determination, suggesting a mismatch between advising behaviors and students' psychological needs (e.g., Erlich & Russ-Eft, 2013). Furthermore, studies that lacked feedback mechanisms or that offered limited academic skill-building opportunities did not effectively support students' sense of competence, particularly among students facing complex academic or clinical demands (Baik, Naylor, & Arkoudis, 2015; Collins, Azmat, & Rentschler, 2019; Ryan & Deci, 2000).

Although the review demonstrates that academic advising is an internationally relevant topic, most of the studies included were conducted in North America, especially the United States. Only a limited number of studies reflect culturally diverse nursing programs or non-Western higher education contexts. For example, a few studies from Asian or Middle Eastern institutions briefly explored advising within different educational frameworks, but these were underrepresented and not synthesized in depth due to language or access limitations (Alfayez, 2019; Chen, 2016; Lee & Kim, 2018). As a result, the conclusions drawn about SDT-based advising effectiveness may not fully generalize to culturally diverse or multilingual nursing programs. This underrepresentation highlights a critical gap in the literature: the need for cross-cultural validation of SDT-informed advising practices and a deeper examination of how cultural norms shape students' perceptions of autonomy, competence, and relatedness within advising relationships.

Although this SLR was conducted in a disciplined manner, potential limitations must be acknowledged. We limited the search process to indexed journals available through the authors' university library system that were peer-reviewed and published articles written in the English language between 2005 and 2025. Thus, this review did not include non-indexed journals or dissertations because they are not peer-reviewed. Given the apparent universal interest in academic advising, as identified in our review, it is possible that more empirical studies are being published in other languages that could complement or contradict some of the conclusions drawn from this review. Therefore, the global interest in academic advising identified in this review is plausible in that additional empirical studies, particularly those conducted in culturally distinct nursing education settings, could offer contrasting or complementary perspectives on the fulfillment of SDT needs. These limitations suggest that future reviews should consider expanding inclusion criteria to incorporate non-English and gray literature sources to achieve a more comprehensive and globally representative understanding of advising practices in nursing education.

Conclusion

The purpose of this SLR is to systematically examine and synthesize existing research on the impact of academic advising on undergraduate students' self-determination in nursing programs. This SLR demonstrates the context of academic advising in US higher education. Academic advising in U.S. higher education has undergone a significant transformation since its inception in the early 19th century. Academic advising was initially prescriptive in nature, with a primary focus on course selection, credit hour tracking, and ensuring that students complied with institutional policies and degree requirements. In this traditional model, the advisor's role was largely administrative and reactive, responding to students' immediate academic needs with little emphasis on their personal, social, or long-term academic development.

However, over time, advising evolved into more developmental and proactive models, reflecting a broader understanding of students as whole individuals with diverse goals, challenges, and aspirations. Developmental advising emphasizes a collaborative relationship between advisor and student, where the advisor helps the student set personal and academic goals, build decision-making skills, and reflect on their educational journey (Crookston, 1972; O'Banion, 1972). Proactive advising, on the other hand, anticipates student needs and provides structured interventions, often targeting at-risk or first-year students, to improve engagement, persistence, and retention. These modern advising approaches align more closely with student-centered theories of learning and motivation, particularly self-determination theory, by actively promoting autonomy, competence,

and relatedness. This shift underscores the importance of advising not merely as a logistical necessity but as a critical component of student success and institutional effectiveness.

According to scholars Harris (2018) and Winston & Sandor (1984), academic advising in its early form, particularly before the 1960s, followed a prescriptive model, emphasizing an authoritative and directive approach. In this model, advisors primarily functioned as institutional representatives, providing students with information about course selection, academic policies, and problem-solving in a top-down manner. The advisor was viewed as an expert, and students' participation in decision-making was minimal. This model mirrored the broader educational paradigms of the time, which favored compliance and efficiency over student empowerment and personal growth.

In addition, successful academic advising is multifaceted and deeply influenced by developmental, relational, and motivational factors. Approaches that prioritize individualized support consistently foster trust and address students' psychological needs, particularly autonomy, competence, and relatedness, yielding positive academic and personal outcomes. When advisors are well-trained and knowledgeable and adopt student-centered, proactive strategies, they not only promote academic achievement and retention but also contribute meaningfully to students' overall development and self-determination.

Finally, the application of Self-Determination Theory (SDT) among nursing students remains limited in existing research, despite its potential to offer meaningful insights into how the fulfillment of autonomy, competence, and relatedness shapes students' motivation, academic achievement, clinical learning experiences, and overall well-being. Across diverse educational contexts, including classroom instruction, clinical placements, simulation-based training, and academic advising, research consistently shows that autonomy-supportive, student-centered approaches in nursing education foster enhanced intrinsic motivation, academic achievement, and personal development among students. These outcomes highlight the applicability and relevance of Self-Determination Theory (SDT) as a robust framework for improving educational practices and student outcomes in nursing programs (Deci & Ryan, 2000; Kusurkar et al., 2012; Ten Hoeve, Kunnen, Brouwer, & Roodbol, 2017). Future studies should consider:

- Investigating how training academic advisors to support students' autonomy, competence, and relatedness impacts advising quality, student engagement, and advisor confidence.
- Conduct longitudinal studies to assess how SDT-informed academic advising influences students' academic persistence, licensure success, well-being, and career development over time.
- Use qualitative or mixed methods approaches to explore how students perceive advisor support for their autonomy, competence, and relatedness, and how these perceptions influence their motivation and academic behavior.

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Appendix A

Study	Country	Methodology	Sample Size	SDT Components Supported
S1	USA	Qualitative	30	Autonomy, Relatedness, Competence
S2	Canada	Mixed Methods	120	Autonomy, Competence
S5	Australia	Quantitative	180	Autonomy, Competence
S8	India	Quantitative	210	Competence, Relatedness
S11	USA	Qualitative	34	Competence, Relatedness
S12	Ireland	Mixed Methods	150	Autonomy, Competence
S14	USA	Qualitative	22	Autonomy, Relatedness, Competence
S16	USA	Mixed Methods	140	Competence
S20	USA	Qualitative	39	Autonomy, Competence
S4	USA	Qualitative	25	Autonomy, Relatedness
S7	USA	Qualitative	40	Autonomy, Relatedness
S9	South Africa	Qualitative	28	Autonomy, Competence
S13	USA	Quantitative	180	Relatedness
S17	Pakistan	Qualitative	36	Autonomy, Competence, Relatedness
S19	Germany	Qualitative	41	Autonomy, Relatedness