

# Volitional competencies and behavioral dynamics of early-stage youth new venture teams: crossing the entrepreneurial Rubicon

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## Abstract

**Purpose** – Volitional competencies, specifically self-regulation and self-control, are recognized as critical during the early stages of new venture creation, when New Venture Teams (NVTs) actively engage in business formation. Similarly, behavioral dynamics such as team collaboration and cohesion also play a crucial role in business venture creation. Yet, the specific individual volitional competencies and their relationship to the behavioral dynamics within youth NVTs remain underexplored. The purpose of this paper is to explore these volitional competencies and behavioral dynamics after NVTs cross the entrepreneurial Rubicon.

**Design/methodology/approach** – Quantitative data was collected on a sample of 515 South African early-stage youth team members regarding seven self-regulation and five self-control volitional competencies and team collaboration and cohesion as the behavioral dynamics. These youth NVTs have crossed the entrepreneurial Rubicon stage, as they created new businesses and are owners/founders of these businesses.

**Findings** – Drawing on the Mindset theory of action phases and the self-regulation theory, this study empirically tested the correlational relationship through structural equation modeling. The findings indicate that the self-regulation volitional competencies, particularly attention focusing, self-motivation, emotion regulation, decision regulation and self-determination, as well as the self-control volitional competencies, planning skill and initiating control, significantly influence team collaboration and cohesion. This study challenges the distinction between collaboration and cohesion and combines them as a single construct.

**Originality/value** – This study presents a novel theoretical framework that supports eight volitional competencies and two behavioral dynamics that are particularly necessary for early-stage youth NVTs to create new ventures. The findings could contribute to new theoretical construct development, policy formulation, measuring instruments and training programme design.

**Keywords** Early stage, New venture teams (NVTs), Youth, Volitional competencies, Self-regulation, Self-control, Behavioral dynamics, Team collaboration, Team cohesion, Entrepreneurial Rubicon, South Africa

**Paper type** Research paper



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## Introduction

Entrepreneurship is a worldwide phenomenon that drives economic development, creates jobs and ignites innovation (Ganuthula, 2025). The importance of creating new business ventures is especially prominent in South Africa, where high unemployment is evident and economic growth is stagnant (Ncube and Ngobeni, 2024). As the creation of new business ventures involves various factors, such as individual characteristics, team dynamics and environmental conditions (Shane and Venkataraman, 2000; Pinzón *et al.*, 2021), New Venture Teams (NVTs) arguably play a crucial role in this process (Klotz *et al.*, 2014). In this paper, we predominantly focus on youth NVTs - defined as two or more individuals between the ages of 15 and 34, in alignment with South Africa's official youth classification (Statistics South Africa (Stats SA), 2024), that collaborate to achieve a common goal of starting a new venture (Davidsson, 2018; Pinzón *et al.*, 2021). This youth age group provides consistent evidence of strong entrepreneurial intention (EI), often exceeding that of older age groups (Bowmaker-Falconer *et al.*, 2024). However, despite their strong EI potential, youth unemployment in South Africa reached an alarming high rate of 45.5% in the first quarter of 2024, significantly exceeding the global average of 32% for the same age group (Statistics South Africa (Stats SA), 2024). These NVTs, being in the early stages of venture formation, also face multiple challenges – including internal team dynamics, a lack of managerial and entrepreneurial experience and constrained access to resources (Klotz *et al.*, 2014).

Previous research suggests that ventures created by NVTs have a higher likelihood of creating business ventures compared to individual entrepreneurs (Lazar *et al.*, 2019). This is attributed to team members' diverse skills, knowledge, experiences and competencies, which navigate the different challenges they face in each stage of the entrepreneurial process (Diakanastasi *et al.*, 2018; Ratten, 2023). In this paper, we adopt the four-stage entrepreneurial process as suggested by Brandstätter *et al.* (2003) and supported by Delanoë-Gueguen and Fayolle (2019), namely, pre-decisional, pre-action, action and post-action. In the pre-decisional phase, NVTs are driven by strong EI (Jintana *et al.*, 2025). While both the pre-action and action phases require volitional competencies to implement goals, transitioning to the action stage depends on mental capacity development (Gollwitzer, 1999; Brandstätter *et al.*, 2003). Thus, we focus on early-stage NVTs in the pre-action and action stages, where individual volition competencies transition to teamwork, collaboration and cohesion (Achtziger and Gollwitzer, 2018; Yasay-Azucena, 2025). Furthermore, these NVTs in the pre-action and action stages have reached and surpassed the entrepreneurial Rubicon stage. The concept of "Crossing the Entrepreneurial Rubicon" signifies the point of no return, where deliberation ends and decisive action begins (Johnson and Tierney, 2011). Volitional competencies are thus pivotal in propelling NVTs from the pre-action phase into the action phase (i.e. volition), where business creation occurs (Kuhl, 1992; Kuhl and Fuhrmann, 1998). Importantly, once NVTs cross the entrepreneurial Rubicon, the establishment of a business venture becomes inevitable (Delanoë-Gueguen and Fayolle, 2019).

Hence, NVTs draw on their volitional competencies – an internal willpower that enables them to stay focused and strive to take action despite obstacles and challenges (Kuhl, 2000; Brandstätter *et al.*, 2003; Keller *et al.*, 2020; Gollwitzer, 2014; Shongwe, 2025). Kuhl and Fuhrmann (1998) identified various volitional competencies that may influence NVT behavioral dynamics (Kuhl, 2000; Duckworth and Seligman, 2005; Forstmeier and Ruddle, 2008), such as self-regulation and self-control volitional competencies. Specifically, self-regulation volitional competencies comprise of attention focusing; self-motivation; emotion regulation; self-relaxation; decision regulation; resistance to uncertainty and self-determination whereas the self-control volitional competencies consist of goal recollection, forgetfulness prevention, planning skill, impulse control and initiation control (Kuhl and Fuhrmann, 1998;

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Kuhl, 2000; Delanoë-Gueguen and Fayolle, 2019), Yet, these previous scholars seem to focus on volitional competencies in the fields of psychology and education (Masaki, 2023) and have not tested all 12 of the self-regulation and self-control volitional competencies in one model in an entrepreneurship context. Additionally, research incorporating these 12 individual self-regulation and self-control volitional competencies and how they translate to NVTs' behavioral dynamics of team collaboration and cohesion is scant (Chen *et al.*, 2018).

The purpose of the paper is two-fold. Firstly, we determine which of the 12 self-regulation and self-control volitional competencies are adopted by youth NVTs in the early stages of venture creation; secondly, how these competencies influence the NVT behavioral dynamics of collaboration and cohesion. Data is collected on a sample of 515 South African youth NVT members who crossed the Rubicon stage, as they have already created new businesses (volition stage) and own and manage those businesses. As the individual volitional competencies are measured in this paper, validity and reliability analysis were done by means of exploratory factor analysis (EFA) as well as confirmatory factor analysis (CFA). Thereafter, the relationships were tested by conducting structural equation modeling (SEM). The findings highlight that eight of the 12 volitional competencies, namely, attention focusing, self-regulation, emotion regulation, decision regulation, self-relaxation, self-determination, planning skill and initiating control, have significant relationships with the behavioral dynamics of team collaboration and cohesion. We identify the volitional competencies and their influence on NVTs' behavioral dynamics beyond the Rubicon stage, which is particularly crucial in the South African context, where business creation is a necessity (Bowmaker-Falconer and Herrington, 2020; Ncube and Ngobeni, 2024). The paper introduces ColCoh, whereby collaboration and cohesion are tested as a single construct in NVTs research. By doing so, we challenge the distinction between the two constructs by offering a holistic perspective on behavioral team dynamics, which could contribute to novel theoretical frameworks and measurement instruments in future studies.

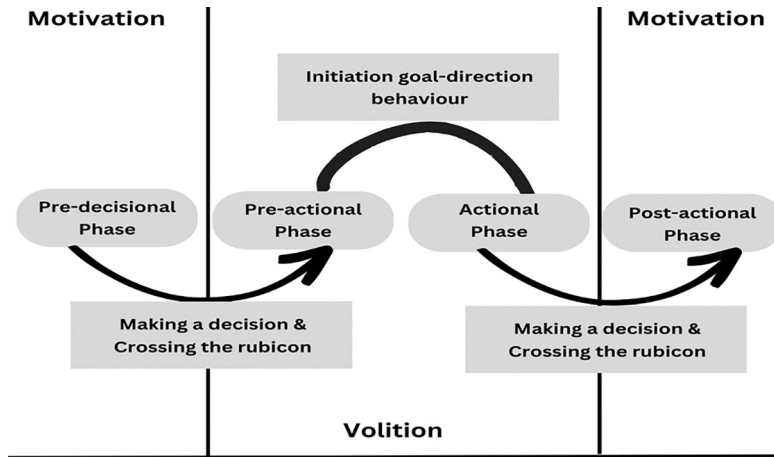
From a practical perspective, the findings can assist aspiring NVT members to develop essential self-regulation and self-control competencies that can contribute to their teams' collaboration and cohesion (Mudrack, 1989; Groß, 2021). The findings could also guide policymakers, youth development and entrepreneurial support organizations to adopt volitional competencies into their incubator, training and support programmes. Nascent entrepreneurs can benefit from this paper by understanding which combination of volitional competencies should be developed in order for them to transition from the pre-action to action stage (volitional stage). Specifically, evidence-based research can strengthen the volition stage, which is imperative for business implementation and practical strategies during the action stage.

### **The theoretical foundation and hypothesis development**

NVTs address complex challenges, foster innovation and initiate new ventures which cultivate a sense of ownership, fulfillment and motivation (Al-Fattal, 2024). Furthermore, NVTs operate in highly uncertain and ambiguous conditions, demanding adaptability, resilience and the ability to navigate uncharted situations (Baillon, 2017; Bonilla and Gutiérrez Cubillos, 2021), which are much needed in a country such as South Africa. Therefore, there is a need to understand the entrepreneurial process and which volitional competencies and NVT behavioral dynamics are necessary for young early-stage NVTs to progress through the volitional stage to reach their goal of business creation.

#### *The entrepreneurial process and crossing the entrepreneurial Rubicon stage*

The entrepreneurial process, which consists of four phases, along with the crossing of the entrepreneurial Rubicon, is visually depicted in Figure 1 and elaborated on below. In the initial



**Figure 1.** The four entrepreneurial phases and crossing the Rubicon  
Source: Adapted from Keller *et al.* (2019)

phase, referred to as the pre-decisional phase, NVTs engage in expectancy-value evaluations as they harness motivational power and establish goal intentions (Keller *et al.*, 2020). This phase involves gathering extensive information and necessary resources as team members aim to embark on entrepreneurial journeys. The formation of a goal intention necessitates a shift to an implemental mindset, which continues throughout the subsequent pre-actional and actional (volitional) phases.

In the second phase, the pre-action phase, implementation intentions relate to specific startup activities, such as crossing the entrepreneurial Rubicon, whereafter the initiation of actions takes place. This phase acts as the preparatory stage for achieving the established goal of creating a business venture (González *et al.*, 2024). The third phase, known as the action or full volitional phase, is driven by volitional competencies, which involve a noticeable increase in gestation activities by NVTs as they actively confront obstacles, distractions and challenges to achieve their ultimate goal of creating a business venture (Brandstätter *et al.*, 2003). Notably, the second and third phases together are collectively referred to as the volitional phase. Following this, the fourth and final phase, referred to as the post-action phase, focuses on reflecting on completed actions, analyzing outcomes, correcting mistakes and strategising for the survival and growth of the newly established venture (Gollwitzer, 2014).

During this progression, NVTs transition from a mindset of deliberate intention or aspiration to one of goal-directed action, driven by implementation intentions, action initiation and an implementation-focused mindset. Together, the four phases, the Rubicon crossing and the corresponding mindsets and theoretical activities within each stage offer a structured overview of the creation of business ventures. Understanding these entrepreneurial phases is crucial, as it sheds light on the behaviors and dynamics of NVTs as they navigate through each phase, particularly in their pursuit of venture creation (Delanoë-Gueguen and Fayolle, 2019; Keller *et al.*, 2020).

*The mindset theory of action phases underpinning New Venture Teams' volitional competencies and behavioral dynamics*

The mindset theory of action phases (MTAP) amplifies the distinction between motivation and volition as it builds on the Rubicon model (Gollwitzer, 2014). Central to this theory is the

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concept of a self-regulation strategy known as implementation intention, which helps individuals address obstacles or distractions that might hinder their goal attainment (Gollwitzer, 2014; Keller *et al.*, 2020). Additionally, MTAP elucidates the cognitive shifts from motivation where goals are set to volition, where action is taken, which occur as individuals navigate the “crossing of the Rubicon” phase until a business venture is created. According to the theory, individuals’ mindsets change as they advance through the various phases of goal pursuit (Keller *et al.*, 2019). For example, after forming goal intentions, NVTs adopt an implemental mindset, which persists throughout the pre-actional and actional phases (Liñán *et al.*, 2024). In the action phase, NVTs focus their information processing exclusively on elements directly related to achieving their goal (Sheeran *et al.*, 2022). MTAP establishes that once NVTs cross the “entrepreneurial Rubicon” and enter the action phase, motivational factors become less relevant, as their actions are now driven by volitional competencies, such as self-regulation and self-control (Bieleke *et al.*, 2021). In this context, the paper suggests that a specific combination of volitional competencies affects the behavioral dynamics of NVTs during the action phase, ultimately leading to the creation of business ventures.

#### *Volitional competencies: self-regulation and self-control*

The concept of volitional competencies is rooted in the volitional power, which refers to an internal willpower that individuals or team members may possess, allowing them to remain focused and push forward in situations where there are distractions and hindrances to achieve set goals (Forstmeier and Ruddle, 2007; Keller *et al.*, 2020; Shongwe, 2025). In the context of NVTs, volitional competencies are essential for team members to work together cohesively and effectively, in a collaborative manner as they make decisions and take action to create and develop new business ventures. Kuhl and Fuhrmann (1998) theorize volition (i.e. willpower) as having two major components, namely, self-regulation and self-control.

The self-regulation theory (SRT) supports the self-regulation and self-control volitional competencies as NVT members have the capacity to regulate their own thoughts, feelings and behaviors to achieve their goals (Baumeister and Vohs, 2007). Self-regulation competencies act positively on NVT members in a manner that creates teamwork that leads the team to create a business venture (Ensley and Pearson, 2005). SRT suggests that self-regulation enables NVTs to set standards for themselves, which serve as guidelines for behavior and they monitor their behavior to assess progress toward their standards as well as the ability to use willpower to overcome obstacles and maintain motivation (Baumeister and Vohs, 2007). Kuhl and Fuhrmann (1998) identified various self-regulation volitional competencies such as attention focusing, self-motivation, emotion regulation, decision regulation, self-relaxation, resistance to uncertainty and self-determination.

Self-control can be explained as the ability or capacity of individuals to change their thoughts, feelings and behaviors to put them in line with one’s set goals (Kuhl, 2000; Amaya, 2020). Tangney *et al.* (2004) postulate that self-control is the ability of people to change their states and responses as well as being able to exert control over their impulses, thoughts, emotions, wishes and performance. Additionally, Kuhl and Fuhrmann (1998) identified five self-control volitional competencies, namely, goal-recollection, forgetfulness prevention, planning skill, impulse control and initiation control. The seven self-regulation and five self-control volitional competencies will empirically be tested later in the paper.

#### *The behavioral dynamics of New Venture Teams: collaboration and cohesion*

Behavioral dynamics of NVTs, particularly collaboration and cohesion, have been identified as essential factors that influence NVTs’ performance and ultimate success (Kothari *et al.*, 2020; Bonilla and Gutiérrez Cubillos, 2021). Collaboration is critical in NVTs, as it enables

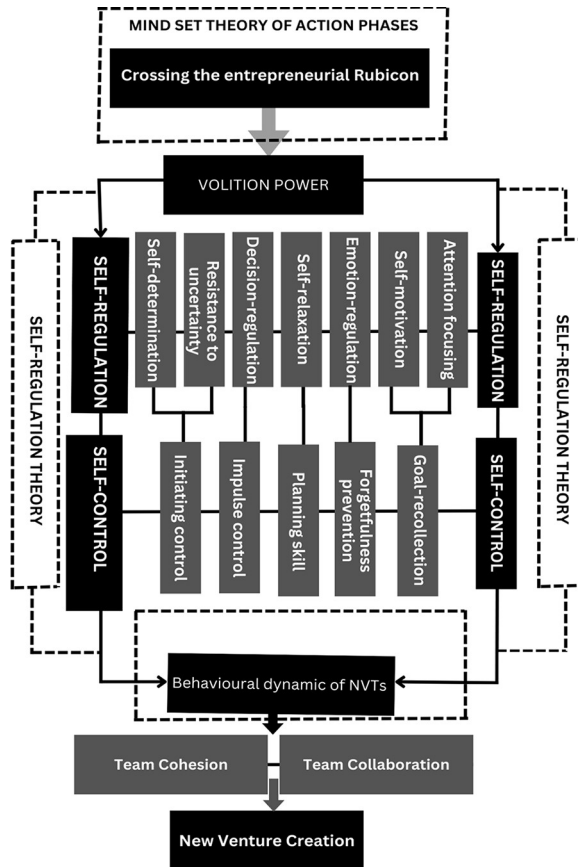
team members to share knowledge, expertise and resources, leading to innovative solutions and better decision-making (Chen *et al.*, 2020; Li *et al.*, 2020). In addition, team members' commitment allows them to foster a collaborative culture, build trust and facilitate open communication that also allows team cohesion, which is crucial for high performance (Bonilla and Gutiérrez Cubillos, 2021; Steira and Steinmo, 2021). Cohesion is explained as the extent to which team members are attracted to and motivated to work with each other (Carron *et al.*, 2002; Morgeson and Hofmann, 2019). Forsyth (1999) and van der Voet and Steijn (2021) see cohesion as an analogous process of the glue that holds or binds the team members together. In NVTs, cohesion is critical, as it enables team members to work together effectively, share resources and make collective decisions (Sanner and Bunderson, 2020). Kothari *et al.* (2020), Baer (2019) and Chen *et al.* (2020) found that both cohesion and collaboration in NVTs are influenced by factors such as communication patterns, team leadership, team diversity, team members' individual characteristics, personality, motivation and team size, among other factors. Yet, the influence of various individual volitional competencies, specifically self-regulation and self-control, on NVTs' behavioral dynamics of collaboration and cohesion, has not been determined. This paper, therefore, proposes that volitional competencies influence the collaboration and cohesion of NVTs that ultimately result in new business venture creation. Several scholars, such as Chiochio *et al.* (2012), suggest that collaboration and cohesion often operate interdependently, which improves team performance.

*Individual-level constructs of self-regulation and self-control, volitional competencies and the cross-level transition to team-level outcomes (cohesion and collaboration)*

In addition to the above discussion, when team members possess strong self-regulation and self-control competencies, they are more likely to work together effectively in a team, fostering a sense of cohesion and shared purpose (Hackman, 2002). Moreover, self-regulation competencies such as decision regulation, emotion regulation and planning skills enable team members to work together seamlessly, sharing ideas and leveraging each other's strengths (Hoegl and Gemuenden, 2001; van der Voet and Steijn, 2021). In an NVT context, previous research emphasizes that individual self-control competencies positively moderate the relationship between entrepreneurial attitude and EI (Dzomonda and Neneh, 2023), resulting in team-level outcomes such as team collaboration. Additionally, team members with self-regulation competencies such as self-motivation and emotion regulation have also been linked to improved teamwork and collaboration in NVTs (Hebles *et al.*, 2018). By developing individual self-regulation competencies and fostering a culture of self-control, entrepreneurial teams can improve cohesion, collaboration and overall performance (van der Voet and Steijn, 2021). We propose that individual team members' shared volitional competencies enhance teams to work together toward a shared goal, fostering a sense of unity which culminates in innovative solutions, better decision-making, greater performance and achievement of goals in the form of new business ventures (Mudrack, 1989; Mullen and Cooper, 1994). Figure 2 graphically illustrates the entrepreneurial Rubicon crossing, interactions between the various individual-level volitional competencies and NVTs' behavioral dynamics. This transition between each of the individual-level volitional competencies and each of the team-level behavioral dynamics is further explained below.

*The relationship between each of the individual self-regulation competencies and the behavioral dynamics of New Venture Teams*

Masaki (2023) states that self-regulation is a multifaceted phenomenon that consists of various components such as motivation, emotion, decision-making and determination.



**Figure 2.** Crossing the Rubicon phase and supporting theories: the relationship between behavioral dynamics and volitional competencies

Source: Own compilation

Gagnon *et al.* (2016) agree and suggest that self-regulation capacity is connected to positive self-help skills that effectively help to control an individual's feelings, actions and thoughts to achieve goals, at the same time being able to deal with a demanding environment like that found in the action or volition phase. Each of the self-regulation volitional competencies and their relationship with the NVTs behavioral dynamics, collaboration and cohesion, is explained below.

The *attention-focusing competency* is a crucial cognitive process that allows team members to selectively concentrate on relevant information while filtering out distractions (Wulf and Lewthwaite, 2021; Nadra *et al.*, 2025). This ability enables NVTs to prioritize essential details, enhancing decision-making and team collaboration (Schepers, 2007; Wickens, 2021). Baron and Tang (2022) highlight that attention focusing significantly improves team performance, particularly through team cohesion, as members with similar skills can work seamlessly to achieve shared objectives.

*The self-motivation competency* involves the ability to identify and pursue intrinsic goals, develop a sense of purpose, maintain enthusiasm and overcome obstacles (Ryan and Deci, 2020). Additionally, self-motivation reflects an individual's drive to meet specific standards (Bande *et al.*, 2016). This focus on goal attainment influences NVTs' behavioral dynamics, particularly cohesion and collaboration in business venture creation. McClelland (1985) further emphasizes that self-motivation is the motive to accomplish a goal, which facilitates teamwork, cohesion and effective venture formation. Finally, Aloysius and Anindito (2019) contend that self-motivation is a driving force (volitional energy) that pushes individuals to achieve goals. Subsequently, two or more team members who have the same self-motivation competency and objectives as well as a mindset to get things done, are likely to collaborate and cohesively work together, as they have common behavioral tendencies that link their efforts together (Bande *et al.*, 2016).

*Emotion regulation competency* involves recognizing, understanding and managing emotions to achieve goals (Kashdan and Ciarrochi, 2013; Niven and López-Pérez, 2025). Effective emotion regulation enables NVT members to handle demanding situations, positively influencing team cohesion and supporting business venture creation (Rolston and Lloyd-Richardson, 2016; Preece *et al.*, 2024). Additionally, if two or more team members with strong emotion regulation competencies can work together, they can effectively control their emotions to maintain an objective that leads to effective team collaboration and cohesion (Tugade and Fredrickson, 2004; Niven and López-Pérez, 2025).

*Decision regulation competency* involves identifying and framing decisions, evaluating information, weighing options and making effective choices (Hikkerova *et al.*, 2019). NVT members with strong decision regulation skills can make informed decisions that support goals such as business venture creation (Beresford and Sloper, 2008). As part of the broader decision-making process, decision regulation influences team behaviors, fostering cohesion and collaboration among NVTs (Beresford and Sloper, 2008). The ability to make quick, sound judgments strengthens collaboration, leading to a well-performing, cohesive team (Over, 2004). In the process of implementing goals, each member with decision regulation competency is bound to connect with another team member possessing the competency, leading to collaboration in decision-making and will remain cohesively connected as they work as a team.

*Self-relaxation competency* involves recognizing and managing stress, using relaxation techniques like deep breathing or meditation, maintaining work–life balance and prioritizing self-care (Jha *et al.*, 2007; Pedersen *et al.*, 2020). NVT members with strong self-relaxation skills can effectively manage stress, supporting collaboration in goal implementation (Jha *et al.*, 2007; Schladale, 2020). During the transition from planning to implementation, NVTs may experience stress that can result in conflicts (Pedersen *et al.*, 2020). Thus, self-relaxation plays a crucial role in mitigating stress, fostering team cohesion and maintaining collaboration (Salas *et al.*, 2018). NVTs that can adjust to self-relaxation in the stressful times during the implementation stage may remain calm and fulfill their goal. This situation will allow easy communication, coordination and cooperation of NVT members (Lutz *et al.*, 2015; Smith, 2021).

*Resistance to uncertainty competency* is essential to manage negative emotions and tensions, which often create conflict within teams (Hikkerova *et al.*, 2019; Salas *et al.*, 2018; Kawahara, 2025). This competency is associated with calmness, which assists NVT members to tackle challenges, make thoughtful decisions and maintain team cohesion (Gollwitzer, 2012). Given that the volition phase of the Rubicon model demands substantial effort (Brandstätter *et al.*, 2003; Delanoë-Gueguen and Fayolle, 2019), staying composed

allows teams to collaborate effectively, sustain motivation and persist despite difficulties, ultimately fostering venture success.

*Self-determination competency* involves identifying and pursuing intrinsic goals, maintaining a sense of purpose, making value-aligned decisions and exercising autonomy (Ryan and Deci, 2020; Ryan, Vansteenkiste and Deci, 2023). Team members with strong self-determination skills make collaborative decisions that align with their values and goals, increasing their chances of success (Sheldon and Elliot, 1999; Guay, 2022; Yang *et al.*, 2025). Key elements such as self-management, goal setting and outcome expectation foster teamwork and cohesion in achieving objectives, specifically, self-awareness and efficacy drive members to collaborate and cohesively establish business ventures.

The team members who possess these individual self-regulation competencies can lead to team-level behavioral dynamic outcomes of collaboration and cohesion. Based on the above discussion, we hypothesize the following:

- H1. The individual self-regulation volitional competencies have a significant positive relationship with the NVTs' cohesion and collaboration.

#### *The relationship between each of the individual self-control and the behavioral dynamics of New Venture Teams*

The second, volitional competency namely, self-control is at the center of individuals' capacity to foster teamwork and achieve one's goals that may need commitment as well as sacrifices as can be seen in the case of NVTs starting a new venture (Li *et al.*, 2025). Each of the self-control volitional competencies and their relationship with the NVTs behavioral dynamics, collaboration and cohesion, is explained below.

*Goal-recollection competency* plays a crucial role in making NVTs not to forget or detract from what has been planned as goals, especially in situations with stressing conditions like those experienced during moving from pre-action to action phases (Keller *et al.*, 2019; Bieleke *et al.*, 2021). Goal recollection may be seen as the capacity of individuals to repeatedly remind themselves of things to do, to rehearse the work to do and to keep non-finished tasks in their mind (Hikkerova *et al.*, 2019). This competency plays a vital role in the volition phase where NVTs work under pressure and in stressful situations, which requires remembering all important procedures and tasks to be done. Furthermore, when team members all remember the tasks to be done, this allows them to work in collaboration and cohesively with the aim to achieve set goals.

*Forgetfulness prevention competency* assist NVTs to remember to work on set goals and strategic plans which then will make them implement their intended goals in the form of business ventures (Chairilisyah, 2019). If NVTs possess the forgetfulness prevention volitional competency, the team will be encouraged to continue working as a team which in turn promotes collaboration and cohesion (Chairilisyah, 2019). It is clear then that the more team members possess the resistance to uncertainty volitional competency, the easier for them to work in collaboration with each other in creating business ventures (Kawahara, 2025). Team members can be influenced to collaborate as they respectively are able to view the future with similar perspectives and hence work in collaboration to face the unknown future (Schunn, 2010).

*Planning skill competency* refers to a team member's planning process and ability to develop and implement strategies to achieve goals (Gollwitzer and Sheeran, 2006; Webb and Sheeran, 2006; Bieleke and Keller, 2021). As a crucial volitional competency, planning is essential for team performance, particularly during implementation. NVT members with

strong planning abilities are more likely to collaborate, as planning inherently involves communication, coordination and shared decision-making (Knapp *et al.*, 2015).

*Impulse control competency* refers to the ability to regulate one's impulsive behavior, which is essential for goal-directed activities (van Gelderen *et al.*, 2015; van Gelderen *et al.*, 2018; Raji, Dinesh and Sharma, 2025). This competency is important for guiding implementation intentions (van Gelderen *et al.*, 2018) as strong impulse control supports collaboration and increases the likelihood of business venture creation (van Gelderen *et al.*, 2018). Teams with high impulse control work more cohesively which ultimately leads to goal achievement (van Gelderen *et al.*, 2015; Galla and Duckworth, 2015; Dorwart, 2024).

NVT members with strong *initiating control skills* can initiate and start new tasks, projects and ventures and are more likely to achieve their objectives (Gollwitzer and Sheeran, 2006; Nsereko *et al.*, 2018). After NVTs have crossed the entrepreneurial Rubicon stage, they act without hesitation and are quick to immediately work on tasks that require achievement of goals (Hikkerova *et al.*, 2019). Frese *et al.* (1997) agree that team members with initiating capacity work to fight setbacks and this can be done more effectively through collaboration and cohesion of team members. Based on the discussion presented above, the following hypothesis is formulated:

H2. The individual self-control volitional competencies have a significant positive relationship with the NVTs' cohesion and collaboration.

Figure 3 below represents the hypotheses depicting the relationships between all seven of the self-regulation volitional competencies (H1), the five self-control volitional competencies (H2) and behavioral dynamics (collaboration and cohesion).

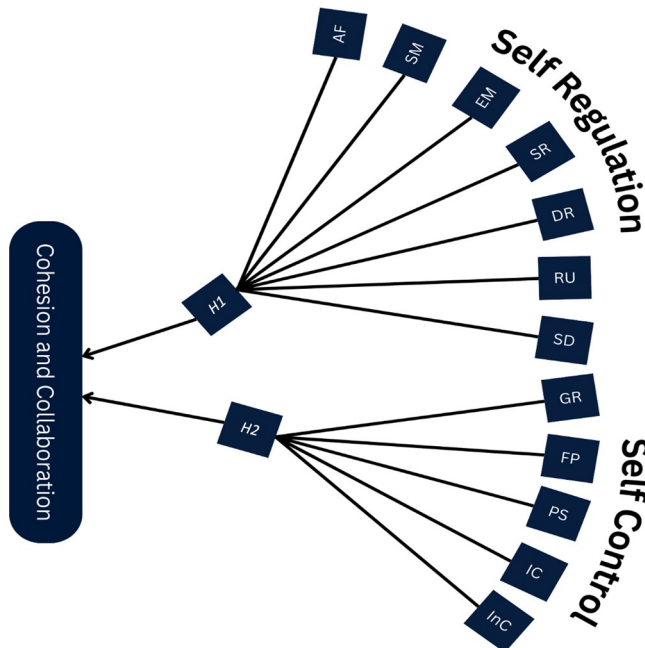
## Methodology

The research philosophy guiding this paper reflects the principles of positivism. In line with that paradigm, the paper uses a quantitative approach and opted for a cross-sectional design as NVT members were required to complete a research questionnaire, which was hosted on the Qualtrics software platform. Notably, while a cross-sectional design presents advantages such as providing a relatively quick and efficient way of obtaining substantial amounts of information from a target population (Leedy and Ormrod, 2015; Ruel *et al.*, 2018), it does not reveal a definite causal relationship. Imperatively, multiple relationships were tested between constructs, a quantitative approach is more appropriate as a large number of respondents could be included which contributes to the robustness of the empirical findings.

### Data and sample

The sampling process was carefully designed and consists of two distinct steps:

Step 1 *Purposive sampling*: A database consisting of a population of young and early-stage NVT members owning businesses in South Africa were scrutinized for inclusion in the final sample. These young NVT members consist of two or more individuals between 18 and 40 years, who had established a business venture (registered) in South Africa which has been operational for up to 3.5 years (Bowmaker-Falconer and Herrington, 2020). As indicated, youth is classified in South Africa as individuals between the ages of 15 and 34, (Statistics South Africa (Stats SA), 2024) however we included team members up to 40 years of age as most of them were in NVTs with team members that are between 18 and 34. This delineation included all possible young NVT members that could be selected for the research study as it contained the possible responses needed to achieve the objectives of the study. Furthermore, a period of up to 3.5 years after venture creation has been delineated, have crossed the



**Figure 3.** Hypothesized model for the 12 volitional competencies and behavioral dynamics: collaboration and cohesion

**Note(s):** AF = attention focusing; SM = self-motivation; EM = emotion regulation; SR = self-relaxation; DR = decision regulation; RU = resistance to uncertainty, SD = self-determination; GR = goal recollection, FP = forgetfulness prevention PS = planning skill; IC = impulse Control, InC = initiating control

**Source:** Own compilation

entrepreneurial Rubicon stage as well as contributing to the volitional stage of the entrepreneurial process (Keller, *et al*, 2019), are classified as early-stage NVTs (Turton and Herrington, 2012, Bowmaker-Falconer and Herrington, 2020).

The outcome of this step was the identification of 4 989 individual team members, ensuring that the questionnaires were allocated to individuals rather than the teams collectively. It is important to note that we aimed to obtain the volitional competencies and behavioral dynamics from an individual-level, collection data from individual NVT members and not from a team-level. Research at the individual level allows for the heterogeneity among individuals as well as the in-depth understanding of the personal decision-making and behavior without the influence of other team members' dynamics. Specifically, studies focusing on volition, cognitive functions and motivation are best investigated at the individual level (Kuhl, 1992).

*Step 2 Simple random sampling:* Following the purposive selection, the next step involved employing simple random sampling to which resulted in the final sample of 515 NVT members in South Africa. This randomization process is critical, as it helps to minimize selection bias and ensures a representative sample. The sample size of 515 is sufficient for using SEM that allows the verification of hypotheses concerning the influence of a set of constructs on others (Tabachnick and Fidell, 2007). The questionnaire was pre-tested on ten NVT members who were excluded from the final sample of the study.

[Bosma et al. \(2021\)](#) state that new businesses all over the world are more likely to be started by men than women and that women are often under-represented in entrepreneurship studies. In this paper, we address this gap by including more women than male team members in the sample, which comprised 64.7% female and 34.6% male respondents. According to [Wiklund et al. \(2017\)](#) and [Botha \(2020\)](#), among others, entrepreneurship studies, especially in South Africa, emphasize the need for more studies where the majority of the sample are women or that women are equally representative in the studies. The average respondent age was 28.95 years, with the majority (51%) in the 18–29 age group, followed by 38% in the 30–40 age group. In terms of education, 53.8% had a tertiary qualification (university level), with 29.1% having completed secondary school. Respondents operated in various industries, with most selecting the “other and specify” category (18.4%), followed by business services (13%), personal services (12.6%) and agriculture (9.5%). The least represented sectors were electricity, gas and water supply (1.7%) and mining (1.6%). Most of the respondents indicated that their NVTs ranged between 2 and 10 members.

#### *Scales for measuring volitional competencies*

For all 12 of the self-regulation and self-control volitional competencies, we used scales developed by [Kuhl and Fuhrmann \(1998\)](#) and revised in 2004 ([Kuhl and Fuhrmann, 2004](#)). [Forstmeier and Ruddel \(2008\)](#) created a shorter version which is easy to apply in self-completion questionnaires because of time constraints that may create challenges of response rate. The scales used were taken from the abridged version of a 36-item volitional Components Inventory (VCI-3) that measured the seven (7) self-regulation and five (5) self-control competencies in a randomized order. The items were measured using a five-point Likert-type scale, starting from 1, “strongly disagree” and ending with 5, “strongly agree.” The Cronbach’s alpha values varied between 0.77 and 0.92 ([Kuhl and Fuhrmann, 1998](#)), and previous internal consistencies of the scales were also observed to be fairly high (Cronbach’s alpha values observed between 0.68 and 0.86) ([Forstmeier and Ruddel, 2008](#)).

#### *Scales for measuring New Venture Teams’ behavioral dynamics*

[Chen et al. \(2017\)](#) developed and [Lechler \(2001\)](#) amended a three-item scale measuring team cohesion. Studies suggest that cohesion entails three main dimensions, which are mutual trust, commitment to the team and social exchange behavior ([Lechler, 2001](#); [Chen et al., 2017](#)). To cater for the three dimensions of cohesion, the items in the three-item scale were “mutual trust is a characteristic of the NVT,” “NVT members were fully committed to the new venture creation on a long-term basis,” and “NVT members integrated or exchanged resources and information with each other.” The items were measured on a Likert-type scale and the internal consistency of the scale comprised a Cronbach’s alpha value of 0.75 ([Chen et al., 2017](#)). [Chiocchio et al. \(2012\)](#) developed a 14-item Likert scale that measured team collaboration. The Cronbach’s alpha coefficient for collaboration is (Cronbach’s  $\alpha$  0.86) ([Chiocchio et al., 2012](#)).

## **Results**

### *Validity and reliability: volitional competencies*

Confirmatory factor analysis (CFA) could be conducted as both the volitional competencies and NVTs behavioral dynamics’ scales were developed and tested by previous scholars ([Kuhl and Fuhrmann, 2004](#); [Chen et al., 2017](#)). However, owing to high multicollinearity between the 12 volitional competencies, the covariance matrix for the CFA model was not positive definite for all 12 competencies and the solution was thus indicated as inadmissible ([Forstmeier and Maercker, 2005](#)). It was therefore decided to test the two-factor solution of

self-regulation and self-control, which was also evident in Forstmeier and Ruddel's (2008) study. The 36-item, two-factor model did not show an acceptable model fit as all of the fit indices were below the recommended thresholds. Model improvement was thus considered, and 14 items were removed that had loadings of less than 0.45. The improved two-factor model indicated that the RMSEA was 0.061, which is below the threshold of 0.08. The CMIN/df value of 2.904 is less than the recommended value of 3 (Schumacker and Lomax, 2004). The CFI (0.904) and IFI (0.904) values for this model are more than the recommended 0.90, and the SRMR (0.0484) value was below the recommended threshold of 0.08. Therefore, this model is deemed an acceptable model fit and adequately fitted the data according to the set of constructs (Raykov and Marcoulides, 2000:36; Hair et al., 2014:579). Although the improved two-factor model provided a fit, 14 items had to be omitted, which was problematic, as we had a specific interest in the individual volitional competencies, which were not all represented in the remaining items. We therefore conducted two additional validity analyses of the data, namely, a second-order factor model representing both self-regulation and self-control, as well as EFA on the 36 items. The second-order factor model did not indicate an acceptable model fit as the following values for CMIN/DF = 3.683; CFI = 0.750; IFI = 0.752; RMSEA = 0.072 and SRMR = 0.0779, where indicated. The EFA results did not indicate meaningful grouping of items, and only four factors were identified, and the items loaded were substantially different from Forstmeier and Ruddel's (2008) study. It was therefore decided to consider each competency separately for analysis.

To measure the competencies separately, due to multicollinearity challenges explained above, convergent validity, average variance extracted (AVE) and reliability measures, namely, composite reliability (CR) and Cronbach's alpha (CA) of the volitional competencies are presented in Table 1.

From Table 1, it is evident that the reliability statistics, CA and CR, are used to illustrate internal consistency (Hair et al., 2010). CR and CA values of above 0,6 generally indicate that acceptable internal consistency exists, meaning that the measures all consistently represent the same latent construct. Of the 12 volitional competencies, one had a CA value above 0.7, four had a value of over 0.6 and three had a value between 0.5 and 0.6, with self-motivation that improved to a value over 0.6 if one item is omitted. The three competencies that had a CA and CR of above 0.5 but lower than 0.6 were retained, as although the

**Table 1.** The composite reliability, average variance extracted and construct validity: volitional competencies

Volitional competency	CR	AVE	CA	If one item is removed
Decision regulation	0.642	0.395	0.603	
Attention focusing	0.681	0.418	0.668	
Self-motivation	0.632	0.368	0.598	0.618
Emotion regulation	0.594	0.332	0.564	
Self-relaxation	0.584	0.320	0.590	
Self-determination	0.712	0.452	0.708	
Planning skill	0.680	0.417	0.677	
Initiation control	0.714	0.459	0.693	
Impulse control	0.437	0.209	0.443	
Resistance to uncertainty	0.486	0.245	0.480	
Forgetfulness prevention	0.307	0.139	0.223	
Goal recollection	0.177	0.098	0.379	

**Source(s):** Authors' own work

reliability is considered poor (Sarmiento and Costa, 2017), it is not considered unacceptable. Moderate loadings of the items and the shortness of the scales (all three items) contribute to the values achieved. From Table 1, it is further evident that the CA, AVE and CR values are all below the required thresholds for impulse control, resistance to uncertainty, forgetfulness prevention and goal recollection, specifically, forgetfulness prevention and goal recollection had loadings below 0.2, which resulted in very low values. Therefore, only eight volitional competencies (six self-regulation and two self-control) are included for further analysis. As this is exploratory research and the sample consisted of early-stage young NVTs, the model is still deemed relevant to be tested as previous research could not confirm the completeness of a model where all 12 volitional competencies are included. Thus, the eight volitional competencies model will be tested to confirm that it captures all major dimensions of volitional and practical relevance is offered in the discussion of the findings regarding the relevance of the reduced set of volitional competencies.

*Validity and reliability: New Venture Teams' behavioral dynamics*

CFA was conducted on the collaboration and cohesion items, and all loadings were above the recommended thresholds, which resulted in an acceptable model fit: CMIN/DF = 2.989; CFI = 0.925; IFI = 0.925; RMSEA = 0.062 and SRMR = 0.0431. Next, Table 2 presents the AVE, CR and CA for cohesion and collaboration constructs of the behavioral dynamics of NVTs.

Table 2 indicates that in the initial stage, the AVE for collaboration (0.458) and cohesion (0.480) were both below the estimated threshold of above 0.5, indicating a lack of convergent validity or that on average, more errors remained in the items of the construct than variance held in common with the latent factor upon which it loaded (Hair et al., 2014). On the other hand, the CR values for collaboration (0.916) and cohesion (0.735) and the CA values for cohesion (0.735) and collaboration (0.91) were all above the thresholds of 0.7. The Fornell and Larcker criteria for discriminant validity state that the square root of the AVE should be larger than the correlation of that construct with all the other constructs (Fornell and Larcker, 1981). As evident in Table 2, it was not the case between cohesion and collaboration. Based on the recommendations of Voorhees et al. (2016), the Heterotrait–Monotrait ratio criterion (HTMT) was calculated. Premised on the analysis, the value of the HTMT for collaboration and cohesion was 0.941, which is higher than the threshold of 0.9, as suggested by Clark and Watson (1995). This reflected a high multicollinearity between collaboration and cohesion, and subsequent discriminant validity was problematic. It was therefore decided to merge the constructs (naming the single construct, ColCoh). Therefore, further statistical analysis could

**Table 2.** Reliability, convergent validity and discriminant validity for behavioral dynamics: cohesion and collaboration (ColCoh)

First/Second stage analysis	Constructs	CA	CR	AVE	Cohesion	Collaboration
<i>First stage</i>						
Constructs *	Cohesion	0.735	0.735	0.480	0.722	
	Collaboration	0.913	0.916	0.458	0.941	0.677
<i>Second stage</i>						
Constructs **		CA	CR	AVE	ColCoh	
	ColCoh	0.927	0.929	0.453	0.673	

**Note(s):** \*Collaboration and cohesion are statistically indistinguishable; \*\*Collaboration and cohesion (ColCoh) are now merged

**Source(s):** Authors' own work

be conducted as these combined constructs have shown the required value of 0.673, which is below 0.9 (Kline, 2011).

### Structural model results

Eight SEM models were conducted, and the results are presented in Table 3. All the fit indices represented excellent fitting models: CFI, IFI, TLI values were all above 0.9; Normed chi-square  $\chi^2/df < 3.00$ ; and RMSEA values were all below 0.05.

Since the goodness-of-fit supported the structural models, it was necessary to proceed with checking unstandardized and standardized regression weights (i.e. structural path estimates). Table 4 presents the structural path coefficients: structural model with respect to each of the eight volitional competencies and ColCoh.

The results indicate statistically significant moderate and strong positive relationships between ColCoh and attention focusing, self-motivation, emotion regulation, self-regulation, self-determination, planning skills and initiating control. The relationship between decision regulation and ColCoh was statistically significant at 5% level of significance, showing a positive weak relationship ( $\beta = 0.148, p < 0.05$ ).

### Discussion of the findings

In this paper, we tested two hypotheses concerning the relationship between volitional competencies (self-regulation and self-control) and behavioral dynamics of NVTs: ColCoh (collaboration and cohesion). Regarding *H1*, we found support for all six self-regulation volitional competencies tested that have an influence on the ColCoh behavioral dynamics of NVTs. Thus, from these empirical findings, it may be presented that the identified self-regulation volitional competencies that may be integrated to influence ColCoh into implementing new businesses in a South African context are attention focusing, self-motivation, emotion regulation, self-relaxation, self-determination and decision regulation. Our findings are in tandem with the literature supporting the notion that attention focusing enhances decision-making and team

**Table 3.** Goodness-of-fit indices: SEM

Model	CMIN ( $\chi^2$ )	df	P	CMIN/df	RMSEA	CFI	IFI	SRMR
Model 1 (attention focusing and ColCoh)	697.73	273	0.001	2.556	0.055	0.928	0.928	0.0424
Model 2 (self-motivation and ColCoh)	719.131	273	0.001	2.634	0.056	0.924	0.924	0.0429
Model 3 (emotion regulation and ColCoh)	705.23	273	0.001	2.583	0.056	0.925	0.925	0.0425
Model 4 (decision regulation and ColCoh)	753.472	273	<0.001	2.760	0.059	0.918	0.918	0.0565
Model 5 (self-relaxation and ColCoh)	753.472	273	<0.001	2.760	0.059	0.918	0.918	0.0565
Model 6 (self-determination and ColCoh)	701.899	273	0.001	2.571	0.055	0.928	0.928	0.0425
Model 7 (planning skill and ColCoh)	693.97	273	<0.001	2.542	0.055	0.929	0.929	0.0431
Model 8 (initiating control and ColCoh)	718.774	273	<0.001	2.633	0.056	0.924	0.925	0.0460
Recommended thresholds	–	–	–	<3 or <5	≤0.08	≥0.90	≥0.90	<0.08

**Source(s):** Authors' own work

**Table 4.** Structural path coefficients

	Relationships	Standardized regression weights	P
ColCoh	← Attention focusing	0.458	<0.001***
ColCoh	← Self-motivation	0.430	<0.001***
ColCoh	← Emotion regulation	0.395	<0.001***
ColCoh	← Decision regulation	0.148	0.011*
ColCoh	← Self-relaxation	0.336	<0.001***
ColCoh	← Self-determination	0.465	<0.001***
ColCoh	← Planning skill	0.523	<0.001***
ColCoh	← Initiating control	0.257	<0.001***

**Note(s):** \*\*\*Significance at 0.1% level of significance ( $p$ -value < 0.001); \*Significant at 5% level of significance ( $p$ -value < 0.05)

**Source(s):** Authors' own work

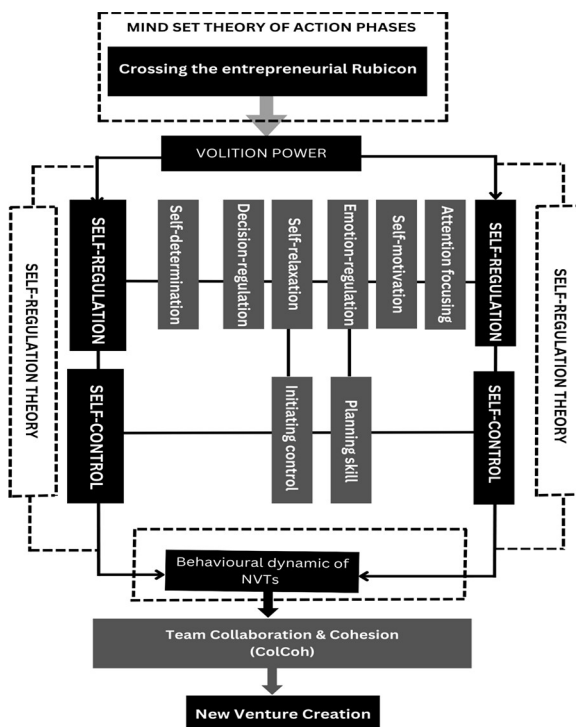
collaboration (Schepers, 2007; Wickens, 2021) as well as team cohesion, as members with similar skills can work seamlessly to achieve shared objectives (Baron and Tang, 2022). Similarly, our findings support McClelland's (1985) stance that self-motivation is the motive to accomplish a goal, which facilitates teamwork, cohesion and effective venture formation. We also confirm that strong emotion regulation skills can effectively control NVT members' emotions to maintain objectives, which leads to effective team collaboration (Tugade and Fredrickson, 2004) and cohesion (Rolston and Lloyd-Richardson, 2016; Baron and Tang, 2022). At the same time, we agree that self-relaxation plays a crucial role in mitigating stress, fostering team cohesion and maintaining collaboration (Salas et al., 2018). Finally, we support the notion that team members with strong self-determination skills make collaborative decisions that align with their values and goals, increasing their chances of success (Sheldon and Elliot, 1999). While still a positive significant relationship, the weakest association was evident between decision regulation and ColCoh. Our findings support Beresford and Sloper's (2008) view that decision regulation influences team behaviors, fostering cohesion and collaboration among NVTs. However, NVTs should focus their development of the decision regulation competency on making quick and sound judgments that, in turn, will strengthen collaboration and result in a well-performing, cohesive team (Over, 2004). As only one of the self-regulation competencies, namely, resistance to uncertainty, could not be tested (refer to Table 1), the model is deemed relevant to confirm self-regulation volitional competencies among youth NVTs. Previous research confirms that resistance to uncertainty, which could not be tested in this model, is negatively perceived by youth NVTs. Specifically, Nabi et al. (2017) found that low levels of tolerance for uncertainty are negatively correlated with EI among youth. Those who resist uncertainty tend to perceive entrepreneurship as too risky and are less likely to consider it as a possible career path (Zhao, et al., 2010).

As for H2, our results support a positive statistically significant relationship between two of the self-control volitional competencies, namely, planning skills and initiating control and ColCoh (collaboration and cohesion). Our findings confirm that the planning skill is essential for team performance, particularly during implementation, and that NVT members with strong planning abilities are more likely to collaborate, which in turn fosters team cohesion (Knapp et al., 2015). Similarly, we agree with the notion that the initiating control competency is closely related to collaboration and cohesion as NVT members work together to combat setbacks and overcome challenges (Frese et al., 1997). Three out of the five self-control volitional competencies as identified in the theoretical model could not be tested

(refer to Table 1). However, planning skill and initiating control are relevant competencies to measure the self-control volitional competency. Nabi *et al.* (2017) agree that youth entrepreneurs are good at planning as they are exposed to digital competencies through various education and learning, which enhances their goal setting. Similarly, Zhao *et al.* (2010) found that youth team members who have higher self-efficacy are more willing to take initiative and create ventures.

*Toward a theoretical framework for volitional competencies and behavioral dynamics of early-stage youth New Venture Teams: ColCoh (collaboration and cohesion)*

An updated theoretical framework is presented in Figure 4, illustrating the relationship between the eight different individual volitional competencies, behavioral dynamics of NVTs and entrepreneurial stages. The main stage, the volitional (i.e. the implementation) stage, is where the primary activities of the NVTs apply their volitional competencies, which leads to an effective environment that further assists the team members to be more collaborative and cohesive to achieve the final goal of creating business ventures. The MTAP and self-regulation theories are applied and incorporated into the theoretical framework, as these are necessary to provide insights to understand how and why the NVTs utilize volitional competencies in the process of creating businesses. Thus, the four volitional competencies that were not tested in this model do not affect the completeness or relevance



**Figure 4.** The updated theoretical framework for volitional competencies, behavioral dynamics of NVTs: ColCoh (collaboration and cohesion) and supporting theories

Source: Own compilation

of the model, as the purpose of the paper is to determine which self-regulation and self-control competencies are relevant for early-stage youth NVTs that influence their behavioral dynamics. In that view, the eight volitional competencies that are included in the updated theoretical framework (Figure 4) fully provide a complete and relevant model for identifying the relevant volitional competencies for young NVTs.

## Contributions/implications of the study

### *Theoretical contributions*

This paper makes several theoretical contributions. Firstly, although the volitional competencies have been researched in fields such as psychology and education (Masaki, 2023), they have received scant research attention in entrepreneurship and even more so regarding specific samples in entrepreneurship studies, such as youth and female entrepreneurs. Hence, this paper provides insights into understanding how volitional competencies, specifically self-regulation and self-control, can provide youth NVTs with an avenue into entrepreneurship. Specifically, this paper focuses on early-stage youth NVT members, as youth unemployment is at an alarming high rate and venture creation is encouraged for the youth (Statistics South Africa (Stats SA), 2024). Similarly, our paper contributes to the volitional competencies necessary in South Africa, where entrepreneurial activity is dismally low and the unemployment rate is increasing (Bowmaker-Falconer and Herrington, 2020; Ncube and Ngobeni, 2024). Furthermore, as women are often under-represented in entrepreneurship studies (Bosma *et al.*, 2021), this study focuses on including more female team members, which contributes to understanding how female team members' volitional competencies influence their team behavioral dynamics to create ventures.

Secondly, this paper theoretically contributes to the entrepreneurial Rubicon research. Previous work has emphasized the power of volition in moving entrepreneurs beyond the Rubicon (Delanoë-Gueguen and Fayolle, 2019) but offers little or no information on which combination of volitional competencies assists in the creation of business ventures. Some studies have focused on self-control (van Gelderen *et al.*, 2015; van Gelderen *et al.*, 2018) while others highlight self-regulation (Hikkerova *et al.*, 2019), yet this previous research has not integrated or tested all 12 volitional competencies in one model. By doing so, we could determine which of the individual self-regulation and self-control volition competencies contribute to the crossing of the Rubicon stage. Notably, the contribution highlights that specific self-regulation and self-control volitional competencies such as attention focusing, self-motivation, emotion regulation, decision regulation, self-relaxation, self-determination, planning skill and initiating control, combined with team collaboration and cohesion (ColCoh) are important for youth NVTs to cross the Rubicon stage.

Thirdly, this paper found that collaboration and cohesion can be combined and tested as a single construct (ColCoh) in the context of NVTs research. We offer a more holistic understanding of behavioral dynamics by challenging existing distinctions between team collaboration and cohesion. This could lead to new theoretical frameworks and the development of more accurate measurement instruments, which could improve construct validity. It could also offer new avenues regarding the predictability of team performance, which could contribute to NVT research from an organizational behavior perspective.

### *Practical contributions: New Venture Team members*

NVT members can benefit from the findings of this paper by learning which volitional competencies are important and necessary to successfully influence team collaboration and cohesion to create new business ventures. Volitional competencies are psychological

strengths that foster perseverance, emotional stability and adaptive thinking. By identifying and developing these in NVTs, communities can cultivate human resilience and self-efficacy, reducing dependency on external aid or top-down economic interventions. Specifically, early-stage youth NVTs can benefit from developing self-regulation competencies such as attention focusing, self-motivation and emotion regulation. These competencies can help young team members to manage their emotions, stay motivated and maintain focus on their goals to develop long-term strategies to improve their teams' behavioral dynamics and performance. By fostering a culture of collaboration and cohesion, youth NVTs can enhance open communication, trust and teamwork.

*Practical contributions: entrepreneurship education and training programmes*

Training programmes can be designed to include the teaching and development of the specific self-regulation and self-control volitional competencies identified in this paper. The pedagogies and curriculum design should be designed in tandem with training assessments to develop an instrument that can identify the strengths and weaknesses in a team's volitional competencies. This will provide valuable ways to enable NVTs through different practical activities as well as volitional competencies developmental programmes. Furthermore, can the findings of this paper enhance the structuring of support systems through incubator programmes, coaching and mentorship of the specific behavioral dynamics (ColCoh) found in this paper? By testing collaboration and cohesion as a single construct, we found that NVTs should focus on collaboration as a crucial factor in cohesion, which could contribute to more effective teamwork and overall team performance. NVTs and training instructors, among others, should understand the factors that influence these behavioral dynamics, which in turn can foster a culture of collaboration, build trust and facilitate open communication. Ultimately, this can lead to enhanced team performance, innovation and success in the competitive startup landscape (Evans and Dion, 2012).

*Practical contributions: policy implications*

Particularly from a South African context, policymakers can use the findings of this paper to integrate specific volitional competencies in the policies that relate to and boost the creation of new ventures. Policy development and creation that is based on empiricism is likely to result in better outcomes than those that are created on assumptions or political influence. Bowmaker-Falconer and Herrington (2020) present that the government of South Africa is increasingly accepting the pertinence of entrepreneurs and NVTs in obtaining sustainable and inclusive economic development and realizes the need to urgently put in place a number of policy reforms to support this goal. Supporting this view, the results of this paper can be incorporated into the general policies in the context of business development and policies that relate to the training of team members or teams interested in creating new business ventures.

*Societal implications*

In a country such as South Africa, the findings provide a framework that introduces volitional competencies such as self-motivation and initiating control for empowering individuals who may otherwise lack traditional resources or networks. Targeting underrepresented or disadvantaged entrepreneurs with tailored training in volitional competencies can promote access to opportunities. This has the potential to narrow economic divides and contribute to more inclusive development – especially in countries working toward equitable transformation. The findings could further contribute to a sustainable entrepreneurial ecosystem as a society with durable, psychologically informed NVTs can shape long-term infrastructure that can support aspiring NVTs.

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Furthermore, through the ColCoh construct, the study promotes collaboration and cohesion as central to effective team dynamics. This insight can shift societal focus from individual achievement to collective success, encouraging values such as trust, open communication and mutual support-essential for social harmony and innovation.

### **Limitations of the paper**

Firstly, the available literature on volitional competencies in a developing country context, specifically in South Africa, is scant. However, international sources, mostly from a Global North context, were considered as points of reference. Secondly, as the purpose of this paper was to sample early-stage young NVT members with an average age of 29 years old, it is possible that older NVT members, who generally have more experience, could bring different responses that can reflect more significant correlation relationships between volitional competencies and behavioral dynamics and issues of reliability and validity may improve. Thirdly, this paper focuses solely on two positive behavioral dynamics of NVTs, namely, collaboration and cohesion (which were merged into one dependent variable) while there are many other NVT behavioral dynamics that could be tested such as critical conflict – disagreement in decision-making, potency – teams’ structure, processes and interaction as well as diversity – functional backgrounds, personality traits and demographics. Finally, despite the advantage of using an averagely short questionnaire (i.e. approximately 10 min to answer), the scales used, particularly for volitional competencies, were developed from scales designed to measure clinical related challenges (Forstmeier and Ruddel, 2008). As high correlations (multicollinearity) of volitional competencies reported by Forstmeier and Maercker (2005) were also observed in this study, it created challenges in the data analysis process, such as difficulty in testing for discriminant validity for all 12 of the volitional competencies, as well as conducting SEM on individual competencies instead of the 12 competencies in one model. Hence, some items may need to be redesigned to suit both entrepreneurial samples and samples from a developing country context.

### **Recommendations and future research avenues**

#### *Methodological avenues for future research*

In this paper, cross-sectional data was used, yet to fully understand the evolving integration of volitional competencies and behavioral dynamics in NVTs over time, future research should consider longitudinal designs or the use of quasi-experimental designs. Additionally, could machine learning methodologies be applied in this NVT research to analyze data, optimize business strategies and predict venture creation?

#### *Contextual and geographical avenues for future research*

Future researchers are encouraged to test the proposed theoretical framework on other samples than youth NVTs, who might have more experience and can offer other distinct relationships. Furthermore, the framework should be tested in Global North contexts as well as other developing countries, besides South Africa, to evaluate the robustness and generalizability of the observed relationships.

#### *An expansion of variables for future research*

Future research could incorporate additional competencies such as self-activation and coping with failure (Forstmeier and Ruddel, 2008). Additional team behavioral dynamic variables can also be included, such as team size, potency, consensus, teamwork, diversity, conflict, experience (Ensley and Pearson, 2005; Diakanastasi *et al.*, 2018).

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Model expansion could also be considered by including the following self-reflection mediating and moderating variables, for example, self-reflection, which has decomposed volitional competencies such as volitional self-efficacy beliefs, volitional self-optimism, informed introjection (i.e. feeling obliged to meet the expectations), external control and intrusions, among others (Kuhl and Fuhrmann, 1998).

#### *Instrument enhancement avenues for future research*

In this study, the short version of the Volitional Competency Questionnaire, referred to as the VCQ-S, was used to measure the self-regulation and self-control volitional competencies. It is recommended that a longer version, referred to as the Volitional Competencies Questionnaire or VCQ-L, be used in future studies to ensure that it becomes contextually relevant to the entrepreneurial field since the instrument was developed to be used in clinical psychology (Kuhl and Fuhrmann, 1998).

#### **Conclusion**

Through the process of acting upon the behavioral dynamics of NVTs, volition is seen to take over from motivation as NVTs progress through the entrepreneurial process and cross the entrepreneurial Rubicon stage. Self-regulation and self-control volitional competencies are needed to push NVTs to the pre-action and action phase, also referred to as the volition phase. As the NVTs move closer to the action phase or the final part of the volition phase, they increase in gestation action and implementation mindset is observed. Previous scholars established the existence of the so-called entrepreneurial Rubicon stage and how NVTs move forward to enter the volition phase. In this paper, we empirically confirm that early-stage youth NVTs are influenced by eight volitional competencies (self-regulation and self-control) and no longer by motivation to create business ventures. All these changes and activities explained in the volition phase are all because of the powerful force referred to as the volition which is decomposed into several self-regulation and self-control volitional competencies (Kuhl and Fuhrmann, 1998). Establishing which specific volitional competencies influence NVTs to move beyond the entrepreneurial Rubicon stage is both practically and theoretically pertinent, as these competencies may be used to educate or improve the establishment of a business by aspiring entrepreneurs.

As specifically, empirical research is scant regarding the volitional competencies and their relationship with behavioral dynamics necessary to create new business ventures; this paper sought to address this gap. Based on the results, eight volitional competencies' impact on the behavioral dynamics of youth NVTs. The majority of the sample also consists of women team members, which addresses a further gap of underrepresentation of women in entrepreneurship studies. ColCoh is further introduced as a single construct integrating collaboration and cohesion, whereafter the behavioral dynamics are measured in this paper. The structural models tested to predict eight decomposed volitional competencies demonstrated a good fit with the data and were collected from the sample of 515 South African youth NVT members. Additionally, a theoretical framework has been developed, which introduces a novel approach to create new business ventures through the eight volitional competencies, behavioral dynamics and theories that support the constructs and activities in the volition stage.

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