Genos International

Social and Emotional Competence Survey (SECS)

Technical Manual

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&

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genos® INTERNATIONAL

Game changing for business. Life changing for people.

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About the Authors

As a part of his PhD thesis Dr Benjamin Palmer developed the first common model (or taxonomy), for emotional intelligence. He also went on to develop the first Australian measure, the Swinburne University Emotional Intelligence Test (SUEIT), the predecessor to the Social and Emotional Competence Survey (SECS). During his PhD candidature, Ben published numerous studies on the reliability and validity of emotional intelligence measures providing the Australian normative data for the Bar-On EQ-i and the MSCEIT. Indeed, it was the examination of these and other measures that led to the development of the SUEIT, a measure designed specifically for workplace talent assessment and development. Today, Ben is the CEO of Genos International which he founded in August 2002 together with Swinburne University to commercialise his work. Genos, and the SECS that forms its core business, is now an Australian export success story. Genos has operations in Australia, North America, North Africa, Europe and New Zealand and distribution partners servicing clients in 33 different countries in 28 different languages.

Dr. Gilles Gignac earned his PhD based in part on a comprehensive factorial analysis of the Swinburne University Emotional Intelligence Test (SUEIT) under the supervision of Prof. Con Stough. Following four years in academia, Dr. Gignac served as Director of Research and Development at Genos from 2008 to 2011, where he developed the technical manual for the Genos 7-Factor EI Assessment. He has published extensively on the reliability and validity of emotional intelligence measures, as well as on cognitive intelligence, personality, and applied psychometrics more broadly. Currently, Dr. Gignac is an Associate Professor at the University of Western Australia, where he teaches psychometrics, statistics, and individual differences. He is also a member of the Editorial Board for the journal *Intelligence* and serves as an Associate Editor for the *Journal of Personality*.

The Outline of the Technical Manual

This technical manual comprises ten chapters, each focusing on a specific aspect of the Social-Emotional Competence Survey (SECS), covering both the workplace, SECS(W), and leadership, SECS(L), versions. Here is an overview of each chapter:

Chapter 1: Introduction

This opening chapter provides an overview of emotional intelligence. It intentionally does not delve into a comprehensive review of the EI construct or literature, pointing readers to other sources for such foundational information. Instead, it focuses on the primary subject of this manual: the SECS.

Chapter 2: The Genos Model of Social-Emotional Competence

This chapter engages in a historical and theoretical discussion on the Genos model, the framework within which the SECS(W) and SECS(L) are embedded, and the competencies they aim to measure.

Chapter 3: Administration and Scoring

Here, the manual outlines the procedures and considerations essential for the proper administration and scoring of the SECS, ensuring users understand the operational aspects of the scale.

Chapter 4: Interpreting SECS(W) Scores

This chapter offers a detailed discussion on interpreting the results from the SECS, providing insights into what the scores can indicate about an individual's social and emotional competence.

Chapter 5: Normative Sample

It describes the demographic and statistical characteristics of the normative sample used specifically for the SECS(W), offering insights into the baseline data against which individual scores are compared.

Chapter 6: Test Score Reliability

This chapter examines the internal consistency and test-retest reliability of the SECS(W) scores, highlighting the precision and stability of these scores across different testing conditions and over time.

Chapter 7: Validity

This chapter presents various forms of validity evidence that support the use and interpretation of the SECS(W) scores, underlining the scale's effectiveness in measuring what it purports to assess.

Chapter 8: Cultural Considerations

Explores how cultural differences can impact the administration, scoring, and interpretation of the SECS(W), providing guidelines for cross-cultural applications of the scale.

Chapter 9: SECS Leadership Version

Introduces a specialized version of the SECS designed for leadership assessments, SECS(L), discussing its unique elements as well as some corresponding psychometric properties based on its own normative sample.

Chapter 10: Concluding Comments

The final chapter summarizes the main points discussed throughout the manual and reiterates the reliability and validity of the SECS(W) and SECS(L) tools for measuring social and emotional competence in workplace settings.

Each chapter is designed to equip users with the knowledge and tools necessary to understand the psychometric properties of the SECS(W) and SECS(L), as well as their practical applications in various contexts.

Statement on the Ethical Collection and Treatment of Data

While the research associated with the SECS was conducted by a private company, which does not have the formal ethics approval processes typically required by universities, Genos International is nonetheless committed to adhering to internationally recognized ethical standards for research involving human participants. All participants in our studies are provided with a clear and comprehensive informed consent form prior to participation. This consent form outlines how their data will be collected, stored, and used, in strict accordance with global privacy laws such as the GDPR, the Australian Privacy Principles, and the U.S. Privacy Act, among others. We ensure that all data is anonymized after a specified period, and participant responses are only reported in aggregate form to protect individual identities. Our commitment to ethical research is further supported by rigorous data protection measures, including ISO 27001:2013 certification, and the voluntary nature of demographic data collection, which is used solely for benchmarking and ensuring the psychometric reliability and validity of our instruments. We believe these practices uphold the integrity of our research while safeguarding the rights and privacy of all participants.

Chapter 1: Introduction

Although a number of models and measures of emotional intelligence (EI) have been published and marketed for use in talent assessment and development, few can be said to have been specifically designed for this purpose. The only EI assessments up until late 2018, to be designed specifically for use by human resource professionals, corporate coaches and industrial/organizational psychologists alike, are our 7-factor self-assessment instrument (Genos EI), our 6-factor multi-rater instruments (SECS, as described in this technical manual), and the Emotional and Social Competence Inventory (ESCI), by Goleman and Boyatzis. Like ESCI, Genos EI and the SECS are ideally suited for use in the workplace as the surveys themselves and the corresponding support materials have all been created with workplace contexts in mind. Genos EI has been designed specifically for use in recruitment (external hires), and the SECS has been designed specifically for use in talent assessment and development. Organisations around the world currently using Genos EI and the SECS are mostly using them to assess and develop talent in leadership, sales and customer service roles, and in roles that involve high levels of emotional labour such as public safety and security, nursing, emergency services and contact centres.

While there are somewhat different definitions, EI can be most commonly defined as a set of abilities to do with emotions (Salovey & Mayer, 1990). These include the ability to recognise emotions (within oneself and others), express emotions effectively, reason with the information inherent in emotions, manage emotions, and positively influence the emotions of others (Palmer, 2003). Three decades of research on EI has shown that these abilities relate to our well-being (Helmi, 2021; Llamas-Díaz et al., 2022; Palmer et al., 2002), the quality of our relationships (Brackett et al., 2005; Casey et al., 2008; Jardine et al., 2022) and our success at work (Grobelny et al., 2021; O'Boyle Jr. et al., 2011). People with higher levels of emotional intelligence are more resilient, tend to have greater satisfaction in their relationships with others, and perform better in the workplace, including leadership capability (Görgens-Ekermans et al., 2021; McCrimmon et al., 2018; Pirsoul et al., 2023). Indeed, there is now emerging evidence from meta-analytic research that EI can be developed (Delhom et al., 2020; Hodzic et al., 2018). There is also emerging research showing that EI development programs produce return on investment (ROI), in terms of improvements in job performance (Jennings & Palmer, 2007) and reductions in costs

associated with absenteeism and turnover (Palmer & Gignac, 2012). As a result, organisations now widely invest in the development of their employees' EI, and the return-on-investment (ROI), of EI development programs can be measured and monetarised in terms of improvements in productivity and reductions in sick leave and employee turnover. We have created a free to use ROI calculator based on this research which can be found here (https://www.genosinternational.com/calculate-roi/).

It will be noted that the area of EI has attracted a non-negligible amount of criticism within academia, much of which may be regarded as a reaction to some of the scientifically unsupported, and arguably outlandish, claims made by several sensational champions of the EI concept. As with many contentious matters in life, the truth likely lies somewhere in between the two extreme schools of thought. That is, EI should not be viewed as capable of singly predicting success in the workplace or any other facet of life, for that matter. Conversely, EI is likely not a totally redundant or illogical construct. Instead, scores derived from a reliable and valid measure of EI may be considered useful in the assessment of an individual, in conjunction with additional sources of information (e.g., intellectual intelligence, employee-motivational fit, structured interviews, etc.). The central purpose of this technical manual is to describe the reliability and validity associated with the scores derivable from the SECS. Additionally, information relevant to the administration, and interpretation of SECS scores is provided.

Description of the Genos Social and Emotional Competence Survey (SECS)

The SECS consists of 42 items designed to measure how well someone demonstrates social and emotional competence in comparison to others. Each item is a workplace (or leadership) behaviour related to the social-emotional competency in question (for e.g., Self-Awareness). We recognise EI as a set of abilities to do with identifying emotions (in oneself and others), using emotions in reasoning and managing emotions (within oneself and others). We believe that emotional and social competencies, as emotional intelligence dimensions, are to an appreciable degree learned capabilities that contribute to effective performance at work (Boyatzis, 2018).

The SECS comes in two different formats, those being Workplace and Leadership or SECS(W) and SECS(L), respectively. Both the Workplace and Leadership variants comprise 42 items designed to measure how well an individual demonstrates social and emotion

competence via their behaviour. Consequently, they are defined as behaviour-based competency measures and fit within the behavioural level of EI theory and its measurement (Boyatzis, 2018).

The Workplace version consists of socially and emotionally competent workplace behaviours relevant to any role, level or job function that involves interacting with others. It can be used with senior leaders through to frontline employees. The Leadership variant on the other hand, consists of socially and emotionally competent leadership behaviours. It is context specific, the context being leadership, and as such it should only be used with people in leadership roles (front line level leaders through to company Directors and CEOs). If you are running development programs with a mixture of employee types (individual contributors and leaders), we recommend you use SECS(W). The SECS versions are very similar. The number of items (i.e., 42), the number of competencies measured, the underlying theory and model, how results are interpreted and reported are all pretty much identical. The benchmarks and some of the items, however, are different. Therefore, while we describe only one method for administrating, interpreting and debriefing results, we provide normative information, reliability and validity statistics for both SECS(W) and SECS(L). Both SECS, as presented in this technical manual, exhibit sound psychometric properties.

Although self-report (only) versions of SECS are available, SECS was designed as a multi-rater measure. The self-only versions exist for two reasons only. Firstly, simply as a tool to introduce the concept and behaviours to individuals; and secondly, so that an individual can compare their self-scores to their rater scores where that is appropriate.

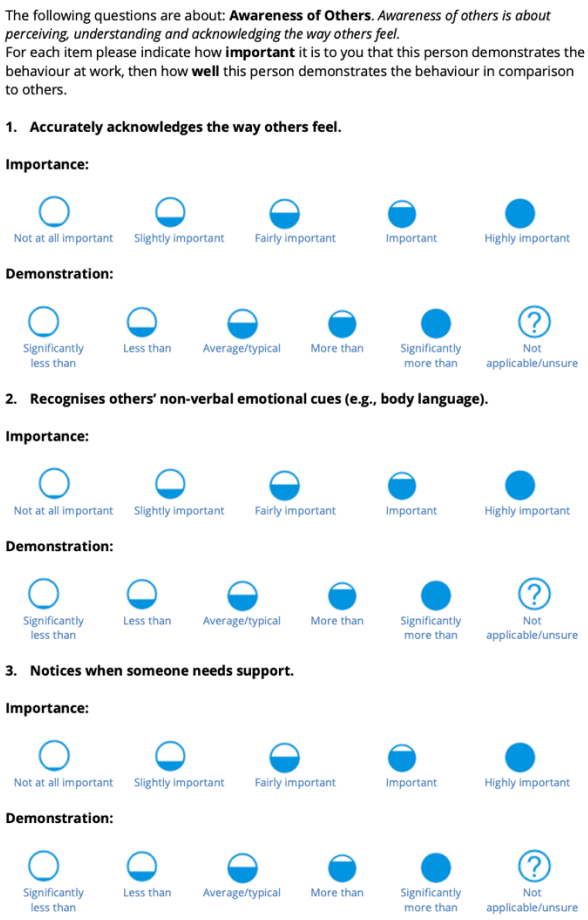
Whenever possible, the 180 or 360 (multi-rater) versions should be employed, both in commercial applications and research settings. While strategies aimed at minimizing socially desirable responses in self-assessments—such as using items with low face validity (where it's unclear how responses affect outcomes) and randomizing item order presented one at a time—can enhance self-assessment validity, they may inadvertently compromise the validity of 360 ratings from others. Stated alternatively, though theoretically beneficial for self-evaluation, these strategies may obstruct others from providing valid assessments.

In point of fact, our 7-factor model measure, Genos EI, is to some degree consistent with such a measurement approach. By contrast, SECS aims to provide survey takers—or raters—with as much information about the competencies it assesses as is practically

possible. During the assessment, raters receive clear definitions for each competency under evaluation. All behaviours associated with a particular competency are displayed together on a single, scrollable web page. This design deliberately clarifies the assessment criteria. We contend that such transparency enhances more reliable and valid ratings of socio-emotional competence. However, we recognize that this same clarity could hinder valid self-assessment, by increasing the risk of socially desirable responding or 'faking good'.

Unique Elements of SECS

At the time of writing this manual, (mid-2024), SECS is the only measure of social and emotional competence, and indeed the area of EI, that measures how Important it is (to raters), that the person in question demonstrates the behaviours of social and emotional competence, AND how well it is demonstrated (as shown in example below).



The following questions are about: **Awareness of Others**. *Awareness of others is about perceiving, understanding and acknowledging the way others feel.*
For each item please indicate how **important** it is to you that this person demonstrates the behaviour at work, then how **well** this person demonstrates the behaviour in comparison to others.

1. Accurately acknowledges the way others feel.

Importance:

Not at all important | Slightly important | Fairly important | Important | Highly important

Demonstration:

Significantly less than | Less than | Average/typical | More than | Significantly more than | Not applicable/unsure

2. Recognises others' non-verbal emotional cues (e.g., body language).

Importance:

Not at all important | Slightly important | Fairly important | Important | Highly important

Demonstration:

Significantly less than | Less than | Average/typical | More than | Significantly more than | Not applicable/unsure

3. Notices when someone needs support.

Importance:

Not at all important | Slightly important | Fairly important | Important | Highly important

Demonstration:

Significantly less than | Less than | Average/typical | More than | Significantly more than | Not applicable/unsure

As reported in this manual, the SECS demonstrates robust psychometric properties, including reliability, a solid factor structure, and meaningful correlations with key outcomes such as resilience, occupational stress, and workplace performance. In a research-driven, large data context, what SECS measures is significant: individuals who excel in the social and emotional competencies assessed by SECS are more likely to perform well at work and on other relevant outcomes. So, why did we include the Importance ratings, a unique feature of SECS? We did so for a couple of reasons.

Firstly, while demonstrating social and emotional competence may be significant in large data sets, it doesn't necessarily hold the same importance across all contexts. Behaviour, especially behaviour that predicts performance, is highly context-dependent. The SECS not only provides benchmarked results that compare an individual's social and emotional competence with others, but it also highlights how important it is for that individual to exhibit these competencies in their specific context. At an organizational level, this feature reveals how crucial it is for employees to demonstrate social and emotional competence, effectively serving as a quasi-validity study.

The second reason we included a measure of the Importance of SECS behaviors is that we believe understanding individuals' mindsets or attitudes toward these behaviors is as crucial as assessing the behaviors themselves. For instance, some may value these behaviors but struggle to demonstrate them, while others might neither value nor effectively demonstrate them. This contrast between what is considered important and what is actually demonstrated enhances the debriefing process, particularly by increasing participant engagement. For example, if someone doesn't believe it's important to demonstrate SECS behaviors, yet their Manager, Peers, and Direct Reports do, it opens up a deeper, more meaningful dialogue about the results and potential actions, rather than merely relying on research-based assertions and/or evidence. The reverse situation is equally informative and insightful. To illustrate the point, a recent example is provided next.

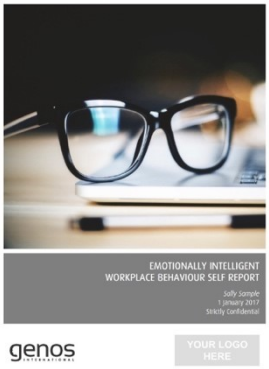
Recently one of us (Ben) was debriefing the Chief Executive Officer of a large mining organisation on their SECS results. The CEO had rated the Importance of the behaviours 'High' to 'Very High'. In exploring this result, the person in question had sound rationales for their Importance responses. They saw the behaviours of SECS as important to the execution of their company strategy, to the safety of people within the organisation (particularly mental health and safety), and to productivity and performance in general. However, the

CEO was surprised by the Importance ratings provide by his executive c-suite team. The executive team of this organisation had rated some of the behaviours as demonstrably less important. For example, the CEO had rated the behaviour “Adjusts their style so that it fits well with others” as a ‘5’ or ‘Highly Important’, yet his team had rated it on average at 2.9 (‘Sometimes Important’). This finding lead to a very rich discussion between the CEO and their team about the importance of adjusting one’s style to best fit the situation and person. The finding gave the CEO insight into the mindset of his executive and the opportunity to discuss and influence it with them.

There are other salient unique features of SECS worth noting. The number of competencies measured (six), in comparison to other EI models is short (for example the EQ-I 2.0 measures a mixture of 15 different traits and competencies). As such, we argue that the SECS model is more memorable and easier to present and work with, especially in group workshop contexts. Measuring a smaller number of competencies also means the assessment is shorter than most on the market. For example, SECS comprises 42 questions in comparison to the EQ-I 2.0 which has 133. This means it takes less time for raters to complete which is an important asset in today’s time constrained world of work. Each competency of SECS is measured by 7 behaviours giving the feedback sufficient depth of analysis but also providing less complexity or information to comprehend. Raters also have the option of providing written feedback for each competency assessed (rather than at the end of the survey as most other instruments do). As a result, raters more often provide qualitative comments that better fit with or represent their ratings.

SECS Reports – the following pages describe the different report types that can be generated from participant self and rater responses to the SECS.

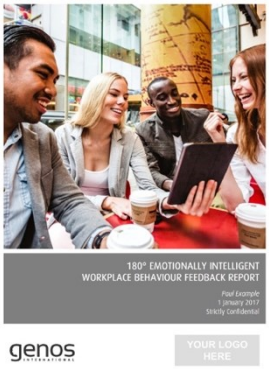
SECS Reports



The Workplace Self-Report (SECS-ws) is designed for use in introductory workshops, conferences or front-line employees.

This individual self-assessment report presents how well an individual believes they demonstrate socially-emotionally intelligent workplace behaviour, and how important they believe it is to do so. Key features include:

- Benchmarked results, providing a comparison with other self-assessed scores.
- A colour-coded 'gap' score methodology to help participants readily identify development opportunities.
- Information on how to effectively obtain feedback from others to balance self-assessed results.



The Workplace 180 Report (SECS-w180) presents how well an individual demonstrates socially-emotionally intelligent workplace behaviour, how important it is to colleagues that they do so, and qualitative comments from raters. All the features of the SECSws are included along with the following additional key features:

- Reliable and valid results that measure how well someone demonstrates social-emotional competence from the most credible source available: those who see the person in action every day.
- Feedback collected from self and a group of colleagues (3-6 recommended) and presented in a single rater category set of results.
- Provides rater Consistency and Familiarity scores to aid in interpretation of results.
- Provides information on how to effectively respond to the feedback.
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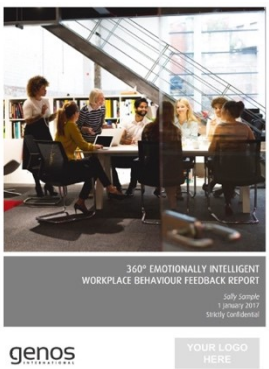
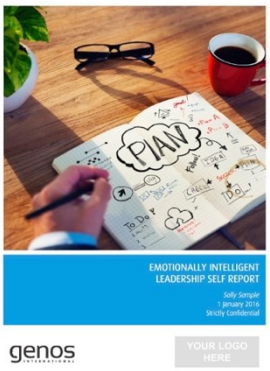


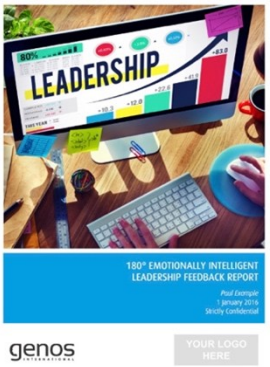
The Workplace 360 Report (SECS-w360) presents all the features of the SECSw180 report plus the following key features:

- Scores and qualitative comments from multiple rater categories including Self, Manager, Peers, Direct Reports, Others (other categories or custom category labels can be provided).
- Summary Data where results from the different rater categories are displayed on a single page to aid in identifying key themes and differences across rater groups.
- Space in the report to note Insights, capture Actions to address feedback and the reflect on the Benefits that may come from doing so.



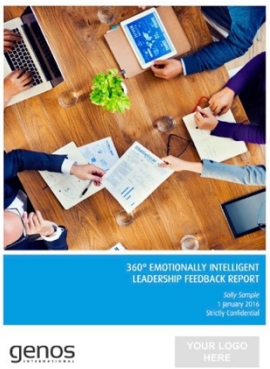
The Leadership Self-Report (SECS-ls) is designed to introduce emerging or front-line leaders to the leadership behaviours and competencies of social-emotional intelligence. It is ideal for use in introductory workshops, conferences and front-line/emerging leader programs. Key features include:

- Leadership benchmarked results, providing a comparison with other self-assessed leader scores.
- A colour-coded 'gap' score methodology to help participants readily identify development opportunities.
- Information on how to effectively obtained feedback from others to balance self-assessed results.



The Leadership 180 Report (SECS-l180) presents how well an individual demonstrates socially-emotionally intelligent leadership behaviour, how important it is to colleagues that they do so, and qualitative comments from raters. All the features of the SECS-ls are included along with the following additional key features:

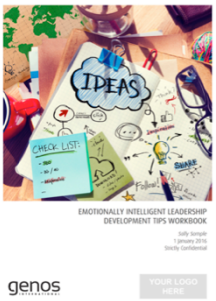
- Reliable and valid results that measure how well someone demonstrates social-emotional competence from the most credible source available: those who see the person in action every day.
- Feedback collected from self and a group of colleagues (3-6 recommended) and presented in a single rater category set of results.
- Provides rater Consistency and Familiarity scores to aid in interpretation of results and information on how to effectively respond to the feedback.

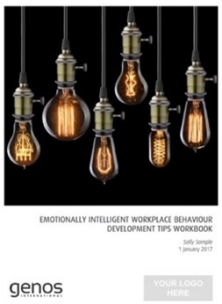


The Leadership 360 Report (SECS-l360) presents all the features of the SECSlw180 report plus the following key features:

- Scores and qualitative comments from multiple rater categories including Self, Manager, Peers, Direct Reports, Others (other categories or custom category labels can be provided).
- Summary Data where results from the different rater categories are displayed on a single page to aid in identifying key themes and differences across rater groups.
- Space in the report to note Insights, capture Actions to address feedback and the reflect on the Benefits that may come from doing so.
- A practical method for responding to the feedback.

SECS Development Workbooks





All the SECS reports (Self, 180, 360, workplace and leadership), are accompanied with a Development Workbook. There is a Development Workbook specific to the Workplace and Leadership versions of SECS. Key features of these Development Workbooks include:

- Development tips on how to enhance social and emotional competence
- Development tips for each behaviour measured by SECS to help people enhance their demonstration of specific social-emotional intelligence behaviours
- Information on how to summarise and respond to the feedback provided in the SECs reports.

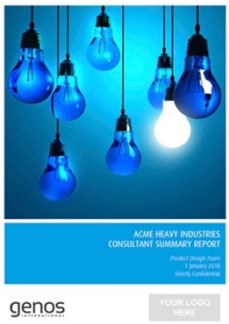
The Development Workbooks provide a self-paced development guide and provide a great aid to facilitators and coaches working with people to enhance their social and emotional competence.

Introduction Workbooks

All the SECS reports (Self, 180, 360, workplace and leadership), are accompanied with a no-cost optional Introduction Workbook that can be downloaded from the Genos Resource Portal. There is an Introduction Workbook specific to the Workplace and Leadership versions of SECS. These works are used to help faciltiators and coaches position the science of emotions and emotional intelligence, how to select raters and what to expect from the SECS assessment and report. Key features of these Introduction Workbooks include:

- Introduction to the science of emotions and emotional intelligence
- Descriptions of the Genos social-emotional competencies and how they contribute to well-being, relationships and success at work.
- Information on how to select raters and what to expect from the SECS assessment and report.

Consultant Summary Reports



Where five or more participants (a participant group), have undertaken one of the SECS assessments a Consultant Summary Report can be generated (at no additional cost). These reports provide a summary of each participants SECS results from Lowest to Highest in a single document. Consultant Summary reports:

- Are a useful resource for program facilitators and/or group coaches. Rather than looking through each person's results, Consultant Reports allow facilitators to perform this activity in a single document significantly speeding up the time it takes to perform this important preparation task.
- Assists those involved in talent management activities and decisions. The pages can be displayed on screen to help drive discussion about Talent candidates.
- Can be generated for Workplace and Leadership versions of SECS.

Group Reports

Where five or more participants (a participant group), have undertaken one of the SECS assessments a Group Report can be generated (at no additional cost). These reports detail:

- Benchmarked overall scores and the range of scores from Lowest to Highest for each competency assessed.
- Aggregate item level results showing average levels of Importance and Demonstration amongst a group across the behaviours measured.
- The percentage of participants in the group that scored Below the 25th percentile, within the Average range (25-27th percentile), and Above the 25th percentile.

Group Reports help you work strategically with group data reporting Talent strengths and development needs. They can also be used to help facilitate discussion about group dynamics, particularly where in-tact teams have undertaken the assessment.

Qualifications Required to use the SECS

Users of SECS must complete, pass and maintain a Genos Certification Certificate in order to use SECS. The Genos Certification teaches users how to administer, interpret and debrief SECS results. The certification involves an oral exam whereby participants must successfully debrief the Genos Master Trainer on a SECS 360 report. To maintain a Genos Certification Certificate users must debrief at least three SECS assessments in a 12 month period, hold appropriate professional indemnity insurance and attend at least one Genos professional development event per year. These events are held four times a year via live webinar and are recorded for people who couldn't attend the live events.

SECS is not a psychological assessment designed to measure psychopathology. As such users of SECS do not require a qualification or to be registered as a Psychologist. SECS is a survey designed to be used by coaches, learning and development professionals, organisational development professionals, organisational psychologists, adult education specialists and facilitators. Qualifications and experience in any one or more of these domains is recommended in order to pass the certification exam. *Importantly, prospective users of SECS should be familiar with their own country's legal requirements regarding the use of surveys in adult learning and development prior to using SECS in an applied context.*

In cases where SECS is being used for research purposes, researchers do not have to hold a Genos Certification Certificate if the research participants are not going to be debriefed of their results. If researchers are intending to generate individual research participant reports and provide them to participants they must hold a Genos Certification Certificate. Genos provides the SECS free of charge for research purposes. In those cases where the scores derived from SECS are simply going to be aggregated for group-level analyses, a researcher is expected to possess some formal background in psychology (or related field), if they are a student, they are expected to be supervised by a suitably qualified academic supervisor and are required to read this SECS Technical manual. To use SECS for research purposes, potential users must first complete the corresponding research application form. Further details can be found at www.genosinternational.com.

Chapter 2: The Genos Model of Social-Emotional Competence

In this chapter, the origins and theoretical framework of the six-factor model of social-emotional competence which the SECS measures are described. The Genos model of social-emotional competence was originally conceptualized in the mid-1990s by Dr Ben Palmer as a part of his PhD project supervised by Dr Con Stough at Swinburne University in Melbourne Australia. It was published as the Swinburne University Emotional Intelligence Test (SUIET; Palmer & Stough, 2001), and has appeared in numerous research papers as such. Since this time, it has been revised and is now being widely used both in research and commercial settings. In this chapter we commence by describing our rationale for designing a model of social-emotional competence. We then outline the model itself and the similarities and differences with other leading models of emotional intelligence and social-emotional competence.

The Genos model of social-emotional competence originated from our work in the area of emotional intelligence (EI), which primarily focused on two main objectives. Firstly, to conceptualize a common definition and taxonomic model of EI; and secondly, to construct a measure of the model designed specifically for use in workplace applications, in particular learning and development (L&D).

The impetus for our first objective came from the plethora of different models and measures of EI available by the mid-1990s and the confusion this brought the area regarding the nature and boundaries of the construct (Pfeiffer, 2001). Variables ranging from emotional abilities and competencies, to so-called 'non- cognitive' capabilities and skills had been placed in popular models of the EI construct. Furthermore, while some theoretical models of EI comprised four salient facets (Mayer & Salovey, 1997), others comprised twenty or more (e.g., Cooper & Sawaf, 1997). Reviews of the area at that time described EI as a 'popular but elusive with fuzzy boundaries' (Pfeiffer, 2001). To help reduce this confusion we set out to establish a common definition and taxonomic model of EI that comprised the primary facets of the construct. We argued that a common definition and taxonomic model would not distract from the value various approaches provide (Palmer, Gignac, Ekermans & Stough, 2008). Rather saw that taxonomic model would serve to provide a common language for EI and the basis for comprehensive measures that assess

the primary facets of the construct, much like the comprehensive taxonomy of personality traits, the widely known Five Factor Model (FFM; Digman, 1990; Costa & McCrae, 1992).

To identify this common model of EI we (a) defined a criterion for what constitutes a common dimension of the construct; (b) systematically compare the components of different models and measures that cover the breadth of variables being placed under the banner of the construct; and (c) conducted a large factor analytic study involving popular measures to empirically determine the common variables amongst them. The factor-analytic technique has been widely used to help determine taxonomies in psychology including the FFM of personality. It is a method of empirically determining the communality inherent in a large amount of multivariate data by reducing it to comprehensible clusters. Essentially we identified that a common definition of EI may involve five higher order factors including: 1) the capacity to recognise and express emotions in the self (Self-Awareness and Expression); 2) the capacity to recognise and understand emotions in others (Awareness of Others); 3) the capacity to reason with emotional information in decision-making (Emotional Reasoning); 4) the capacity to regulate emotions in the self (Self-Management); and 5) the capacity to positively influence the emotions of others (Positive Influence). More information on this work can be found in Palmer, et al., 2008).

Today, the Genos model is largely based on this original factor analytic study. It is also based on factor analyses by Gignac (2005) of the SUEIT (Palmer & Stough, 2001), an EI inventory designed to measure the original five-factor taxonomic model of EI identified by Palmer (2003). This work determined that the original Self-Awareness and Expression dimension could be split into two sperate factors; 1 concerning Self-Awareness, the capacity to recognise emotions within oneself; and 2 Emotional Expression, the capacity to effectively express how one feels. Gignac (2005), also identified a 7th dimension, Emotional Self-Control, the capacity to effectively control strong emotions within oneself. Indeed Gignac's 7-factor model of EI underpins Genos EI, our assessment designed specifically for self-assessments and for use in Recruitment.

In late 2011 Genos decided to conduct a major revision of the Genos model and measure of EI. The aim of this revision was to make the model and measure more practically useful, engaging and contemporary. To make the model more useful in terms of it being accessible and memorable we decided to reduce the 7-factor model of EI that underpinned the instrument at the time from 7 to 6, dropping the Emotional Self-Control subscale. This

effectively reduced the number of competencies for participants to 'take-in', and took a way a common participant confusion, that being the difference between Emotional Self-Management and Emotional Self-Control. To make the model more engaging and contemporary we decided to move from the nomenclature of EI to the nomenclature of Social and Emotional Competence. In doing so we also re-label the competencies of the model such that they were more in-line with the behavioural level theory of EI described by Goleman and Boyatzis (Boyatzis, 2018). Around 2012 Goleman relabelled his model of EI as a model of social and emotional competence. This work saw us define the Genos model of Social and Emotional Competence. The various competencies and their definitions are presented below. It should be noted that the Positive Influence competency of the model is redefined and labelled in the model that underpins the Leadership version of SECS to Inspiring Performance to better reflect the contextualisation of the model in Leadership.

Chapter 3: Administration and Scoring

The SECS would be expected to be administered within two broad scenarios: (1) professional and (2) research. Common professional contexts include recruitment, selection, and development. In order to administer the SECS within a professional context, the person administering and debriefing the SECS report must be formally accredited through the completion of the SECS Certification Course and earned the Digital Credential recognising their successful completion of the course, that is administered and provided by Genos (see www.genosinternational.com for further details).

In professional scenarios, the administration of the SECS is always completed via the Genos on-line system. Thus, individuals respond to the items on-line while sitting at a computer, and the on-line system scores the item responses and calculates the corresponding raw and percentile scores. Consequently, the person administering the SECS does not need to score the questionnaire. However, for the purposes of thoroughness, we note that there no negatively keyed items within the SECS, therefore, none of the items need to be reverse scored.

The absence of negatively keyed items in the SECS might seem surprising, given that well-known sources recommend their inclusion (Hinkin, 1998; Winkler et al., 1982) to mitigate the risk of acquiescent responding, i.e., where respondents agree with all

statements regardless of content (Bentler et al., 1971). However, in developing the SECS, we deliberately chose not to include negatively keyed items based on evidence that they can introduce significant challenges. Research suggests that negatively worded items can impair response accuracy, reduce internal consistency, and create methodological artifacts that distort factor structures (Schriesheim & Hill, 1981; Salazar, 2015; Eys et al., 2007). Furthermore, the increased risk of respondent errors (Sauro & Lewis, 2011), reinforced our decision to use only positively worded items in the SECS.

Next, the seven items associated with each of the seven subscales are summed (thus, all items carry an equal weighting in the scoring). Then, each subscale sum score, as well as the total scores, is benchmarked against a percentile map which has been developed based on the relevant normative sample.

In contrast to professional scenarios, common research contexts include a paid academic engaging in research relevant to individual differences, or, alternatively, a student engaged in research to achieve a higher degree while being supervised by a paid academic. In the research context, the SECS may sometimes be administered in a paper-based format, as the creation of individual reports is not necessary, and/or the availability of computers is not feasible. Further details relevant to the use of the SECS for research purposes can be found at: www.genosinternational.com.

Suitable Ages and Residents

The SECS is designed for adults who are actively participating in the workforce, with a normative group ranging from ages 18 to 100, covering the typical age span of most workplaces. This makes the SECS well-suited for administration to adults within the workforce. It should not be administered to adolescents or children, as the scale was neither designed for these age groups nor normed on them. While individuals slightly younger than 18 may be able to complete the SECS without significant deviation from the norms, it is recommended that the SECS not be administered to anyone under 15 years of age.

The SECS has been successfully administered to English-speaking residents in several developed countries, including Australia, the United States, the United Kingdom, India, Canada, and Hong Kong. Psychometric analyses, specifically internal consistency reliability, have been conducted on country-specific samples with N greater than 150 in each of these

locations, consistently demonstrating acceptable reliability. Consequently, the SECS can be confidently applied to English-speaking adults in these countries and may also be suitable for use in similar populations in other regions, particularly in comparable European countries.

Readability of the SECS

A survey should ideally use the simplest language possible, all other factors being equal. The SECS was developed with this principle in mind, despite being specifically designed for adults rather than adolescents or children. To evaluate the readability of the SECS, its 42 items were analyzed using the Flesch Reading Ease and Flesch-Kincaid Grade Level metrics. According to Kaufman et al. (1991), a Flesch Reading Ease score ranges from 0 (indicating text that is effectively unreadable) to 100 (indicating text that is easily readable by any literate person). The Flesch-Kincaid Grade Level score is straightforward, representing the educational grade level needed to comprehend the majority of the material.

The readability analyses were conducted using the 'Spelling and Grammar' tool in MS Word. The combined analysis of all 42 SECS items resulted in a Flesch Reading Ease score of 32.2. Additionally, the Flesch-Kincaid Grade Level was estimated at 10.7, corresponding to an age range of 15-16 years. Therefore, the SECS is considered to have acceptable readability, especially given that it is intended for administration to adults.

Time to Complete

The 42-item SECS typically takes between 10-15 minutes to complete when administered online and roughly the same time in a paper-based format. There are no time restrictions for completing the SECS, so respondents should not feel pressured by time. However, it is recommended that respondents maintain a steady pace and avoid excessive rumination on individual items. Completion times of less than 10 minutes or more than 20 minutes (online) may indicate issues: in the former case, the respondent may not be taking the test seriously, while in the latter case, the respondent may be struggling with English proficiency or understanding the items.

Conditions Under Which to Administer the Genos EI

First, the individual administering the SECS must be thoroughly familiar with the survey and its corresponding reports. This familiarity is typically achieved through completion of the SECS Certification Program, which is a prerequisite for those wishing to administer the SECS to the public. In cases where the SECS is used solely for research purposes and no reports are provided to respondents, formal accreditation by Genos is not required. However, the individual overseeing the project is expected to hold an advanced research degree in psychology or a related field. The SECS is available for research purposes, but a request form must be submitted and approved by Genos before use. Additional details can be found at www.genosinternational.com.

Given that the SECS is likely to be used in various contexts, it is expected that the survey may be administered at different times throughout the day. However, certain factors should be taken into account when deciding on the timing of administration, particularly those related to the specific individual selected to complete the survey.

First, the individual completing the SECS must be alert and calm. While there are no "right" or "wrong" answers to the SECS items, respondents need to be attentive and motivated to engage in the introspection necessary to provide meaningful responses. In recruitment settings, it may help to reassure respondents by explaining that the SECS results will not be the sole basis for personnel decisions, as other sources of information will also be considered. In research settings, respondents can be reassured by informing them that their data will be analyzed only at the group level, and individual responses will not be singled out or reported. It is essential to clearly communicate the purpose of the testing to respondents and inform them that participation is voluntary (i.e., informed consent). It is

In certain circumstances, the SECS may need to be administered on multiple occasions, particularly when an intervention is expected to impact social and emotional competency scores. In such cases, the SECS should be administered once before the intervention and at least once afterward, allowing sufficient time for the intervention to influence socio-emotional scores.

Rater selection and numbers:

While the SECS exhibits sound psychometric properties, rater selection in any given use of the SECs is critical to the reliability and validity of an individual's SECs results. The selected raters must be able to provide objective and fair feedback from an informed view about how well the person being assessed demonstrates the behaviours of the SECs. Raters should be colleagues and can include a person's Manager(s), Peer(s), Direct Report(s) and Others who work with or have previously worked with the person either in a Full Time or Part Time capacity (at least one day per week). People selecting raters (whether it be the person themselves, their manager or some other stakeholder), should be guided to select rates who are familiar with the day-to-day activities and work undertaken by the person being assessed. Finally, and in addition to the above, raters need to have:

- Worked with the person for a period of at least six months
- Work with the person no longer than 6 months ago, and in the last 12 months
- Have the opportunity to interact with and observe the person in a variety of different contexts at work (for example team meetings, one-on-ones, virtual working etc).

In a development context:

- Raters can be self-selected by the person being assessed using the aforementioned criteria as a guide, and entered by them straight into the Genos surveys platform.
- A rater list can be drafted by the person being assessed and signed off on by a stakeholder and then entered in to the Genos system.

In a talent management and development context (where assessment results are being used to aid in organisational decision-making such as readiness for leadership positions, promotion, performance management etc):

- A rater list can be drafted by the person being assessed and signed off on by a stakeholder and then entered in to the Genos system.
- Raters can be selected by stakeholder(s), and kept anonymous to the participant by entering them into the Genos system via an excel spreadsheet (that can be provided by Genos). In this case we recommend the participant have an option to nominate raters they don't want to rate them and the rationale as to why.

In talent management contexts it's important that people being assessed know that their results will be used to aid in organisational decision-making and therefor visible to both themselves and stakeholder(s). The uses of 360 feedback in these areas has resulted in an increased focus on the measurement quality of 360 assessments (e.g., reliability and predictive validity), and the end-to-end execution of 360 feedback (that can include things like rater selection criteria, how feedback is delivered, and the environment within which 360 feedback is used), as these become more important to the quality of talent decisions made, and for organisations being protected against potential legal risks arising from improper use, inequity and adverse impact. In these higher stakes contexts it's important that people use the Genos EI 180 and 360 Assessments as recommended in the Genos Certification Course.

Rater numbers:

To ensure the reliability of the rater data Genos recommends that the minimum number of raters in any given rater category is 3. To ensure rater fatigue and overload doesn't occur, we recommend that a maximum number of raters with a rater category is 6. For the Manager category the minimum can be 1. For leaders with large direct report teams (e.g., 8, 10, 12 or more people), a leader may wish to include all their direct reports. This is possible so long as each direct report fits the aforementioned rater selection criteria (e.g., have worked with the person for more than 6 months etc).

Specific recommendations for administering the SECS (research; paper-based)

Ensure the respondent is seated comfortably at a desk in a quiet room. In clear, non-technical language, explain why they have been asked to complete the Social and Emotional Competence Survey (SECS). If the study is conducted within a university or an organization with a recognized ethics committee, provide the respondent with the relevant informed consent form (approved by the ethics committee) and obtain their signature. Remind them that participation is voluntary and that they can withdraw at any time without any repercussions.

Observe the respondent to ensure they appear relaxed. If they seem anxious, reassure them that their scores will remain confidential and that the data will only be

analyzed at the group level. Once you are confident that the respondent is participating voluntarily and is comfortable, encourage them to respond honestly and to answer all items, even if they are unsure of the best response or if an item seems inapplicable. It may be helpful to clarify that each item should be associated with only one response, especially if the respondent is unfamiliar with psychometric inventories.

If the respondent asks questions about specific items, provide simple clarifications when possible. For more complex or conceptual questions, acknowledge the importance of the inquiry but suggest discussing it after the survey is completed.

Once the respondent indicates they have finished the survey, check for any missing responses if the SECS was administered in a paper format. If any responses are missing, encourage the respondent to answer those items to the best of their ability. If you are satisfied that the survey has been completed validly, you may ask the respondent about their experience and thoughts on the survey. In many cases, participants may not be interested in discussing the survey in depth; if so, thank them for their participation and provide a debriefing sheet that explains the study's purpose (in non-technical terms) and where they can find the results once the study is complete. If the respondent wishes to engage in a more detailed discussion or learn about their scores, refer them to a SECS-certified practitioner for a comprehensive follow-up and debriefing session.

Ethical Considerations

In both professional and research settings, Genos International strongly recommends that the SECS be administered under the clear understanding that participation is entirely voluntary. Respondents should receive a brief explanation of the SECS, including why they have been asked to complete it and how their scores will be used. Genos International advises against using SECS scores as the sole basis for workplace decisions; instead, it is recommended to supplement these scores with additional information from other recognized psychometric inventories, structured interviews, and references.

In research contexts, Genos International supports adherence to the American Psychological Association (APA) guidelines for conducting ethical research. These guidelines emphasize the importance of obtaining informed consent, ensuring participation is not coerced, and providing a debriefing. Further details can be found at www.apa.org.

Chapter 4: Interpreting SECS Scores

In order to administer and interpret the SECS an individual must first complete the Genos Certification Course, pass the report interpretation and debrief exam, and achieve the Genos Certification Credential (see www.genosinternational.com for more details). Consequently, the information provided in this section of the manual should not be viewed as a substitute to the formally recognized training process. Instead, it should be viewed as informative and possibly supplementary.

Steps in Interpreting SECS Scores and Debrief Results

Generally, an individual's SECs scores should not be interpreted without the individual present and without a general understanding of the context the person is in. Scores should not be seen as high or low without an exploration of the context the person is in. An open and open probing questioning approach should be used that draws the context of the individual and their workplace into the conversation to interpret the results. People debriefing results should ask questions about what the person does to demonstrate the behaviours in question and the nature of the context and relationships they have with the people who have provided them with ratings. People debriefing results should also have a sound understanding of the Genos model, how the instrument is scored and how the results are presented. Being able to confidently describe Importance, Demonstration and Difference scores together with the symbols used to indicate whether raw Demonstration scores are Above the 75th Percentile, within the Average range (25-75th percentiles) or Below the 25th percentile is particularly important. Practitioners interpreting and debriefing reports should take a minimum of 30 minutes to read through a report and the free text responses that have been provided in preparation to debrief results. The 8-step report interpretation and debriefing process taught in the Genos Certification course is summarised below.

Step 1 – State the Purpose and Confidentiality

- State the purpose of the debrief and be clear about the confidentiality of the information shared and discussed. Generally, an individual's remarks to you should not be shared with anyone.
- Stating the purpose gives meaning and context to the debrief and sets up expectations for how the person should view their results and respond to them. For example "we are here today in the context of leadership development. Our purpose is to view these results to identify strengths that could be leveraged and/or opportunities for development that could be addressed with certain actions to enhance your leadership of people".

Step 2 – Explore their Goals

- Take time to explore the participant's goals. This helps frame the purpose of the debrief and create positive emotions for the participant. For example, you could ask, "What would you like to achieve from our time together today?" or "Are there any people leadership functions (such as motivating and engaging your team, facilitating authentic dialogue or managing emotions more effectively), that you'd like to enhance within yourself?

Step 3 – Revisit the Genos Model

- Go over the model where necessary (if you have followed our best practice approach, the participant should be familiar with it). To engage the participant, ask questions about what they remember about the model. Where the participant has not seen the model, you will need to provide a more detailed explanation of the six competencies.

Step 4 – Explain How the Results Are Presented

- Within the report, benchmarks are used to help people understand how their results compare to a normative sample of results in the wider population. Offer an explanation about these benchmark scores.
- Explain the significance of the gap scores and explain why closing them is important for both general workplace behaviour and performance effectiveness.

Step 5 – Interpret the Familiarity and Consistency Results

- Because the assessment is behavioural, it is important to look at the familiarity and consistency scores, as these will give insight into the validity of the participant's results.

Step 6 – Facilitate an Interpretation of the Results

- Give the participant time to read the results.
- Go over each set of results with a coaching and mentoring approach.
- Note any themes or patterns that might exist. For example, someone might do better on skills to do with one's own emotions and not so good on those concerned with others' emotions (or vice versa).
- Use open and open-probing questions to help the participant explore the data. It is good practice to conceptualise and rehearse what you will say and the questions you will ask to get the conversation and interpretation of results going (for each skill or set of rater results).
- Explore the qualitative comments in the report. Note whether they are consistent with the results. Sometimes a single rater (only) provides comments that aren't aligned with the results. This can happen when one single rater has a different point of view to others.
- Generally, the participant should be doing most of the talking.
- Be action oriented by helping the participant identify insights and actions they could take to enhance their demonstration of emotional intelligence. Consult the Development Tips Workbook where necessary in doing so.
- Repeat this process for the results from each rater category.

Step 7 – Summarise Key Insights, Actions and Benefits

- Summarise the debrief and engage the participant in a conversation about their insights from the results, the actions they are planning to take and benefits that they see from these courses of action.
- Ask the participant if they have any further questions.

Step 8 – Discuss the Response Process

- Outline to the participant the Genos best practice approach to responding to results – this approach is covered in the participant's Development Tips Workbook and forms a crucial part of the debrief. Responding in an emotionally intelligent way to feedback can enhance the relationship the participant has with their raters and lead to deeper levels of understanding and trust.

SECS and Psychopathology

While scoring at the extremely low end of the percentile range (e.g., the 1st percentile) is possible, it's important to understand that such a score does not necessarily indicate that an individual has pathologically low levels of emotional intelligence or any other psychological construct. There are two key reasons for this. First, percentile scores are relative and lack absolute meaning, so any suggestion that a specific percentile score corresponds to a psychological condition is unfounded without supporting research. Second, there has been no research linking the SECS to psychopathology, as the survey was not designed for that purpose. Therefore, while low percentile scores may suggest areas for relative improvement, they should not be interpreted as evidence of a psychological deficit or disorder.

Chapter 5: Normative Sample

The normative sample upon which scores from an inventory are interpreted should be both large and representative of the population of interest. In the context of the SECS(W), the population of interest is an adult, English speaking, working population with at least a high school education. The SECS(W) consists of 84 items; however, 42-item of the items measure the importance and 42-items measure the demonstration of socio-emotionally related phenomena. The SECS(W) was administered in various settings, including research projects, workshops, and professional environments like HR and executive coaching, from 2014 to 2024. This administration collected 15,114 individual self-reports and over 40,000 observer reports from managers, peers, and direct reports. Given that more females (9,978) than males (5,064) completed the SECS(W) and its associated demographic questions, we aimed to create a gender-balanced normative sample. To achieve this, we randomly selected 5,064 females from the initial, larger female dataset. In this section of the manual, the nature of the SECS(W) normative sample (*N* = 10,200) will be described by providing descriptive statistics relevant to age, gender, education, occupation, role-level, industry.

Age

The SECS(W) normative sample consists exclusively of adults, ranging in age from 18 to 100, with a mean of 41.67 (*SD* = 10.52). The absolute skew and kurtosis levels associated with age distributions were equal to .32 and -.24, respectively, which is suggestive of an approximately normal distribution. As can be seen in Table 5.1, the normative sample consisted of adult individuals across the adult age spectrum of individuals likely to be found in the workplace.

Table 5.1

Frequency Distribution of Age Groups that comprise the SECS Normative Sample

Age	Frequency	Percentage
18-23	153	1.50
24-28	955	9.37
29-33	1417	13.91
34-38	1675	16.44
39-43	1736	17.04
44-48	1488	14.60
49-53	1258	12.35
54-58	870	8.54
59-63	444	4.36
64+	193	1.89
Total	10,200	100

Gender

As expected, the gender breakdown of the normative sample included exactly the same number of females (49.65%; *n* = 5,064) and males (49.65%; *n* = 5,064), which is largely consistent with the known populations of many industrialized countries. A small percentage of people selected 'I would prefer not to say' (0.56%; *n* = 57) and 'Other' (0.15%; *n* = 15).

Education

As can be seen in Table 5.2, the normative sample is relatively well educated (e.g., 25% master's degree), although there are respectable numbers (100s) across all education groups.

Table 5.2

Frequency Distribution of Education Levels that Comprise the SECS Normative Sample

Qualification	Frequency	Percentage
Some Secondary/High-school education or below	162	1.59
Graduate of Secondary/High-school	599	5.87
Certificate	677	6.64
Diploma	759	7.44
Bachelor's degree	3594	35.24
Graduate Certificate	393	3.85
Advanced Diploma	347	3.40
Graduate Diploma	646	6.33
Master's degree	2508	24.59
Doctoral Degree	392	3.84
I would prefer not to say	123	1.21
Total	10,200	100

Role-Level

The self-nominated individual position-levels within the normative sample was relatively diverse (i.e., from 'individual contributor' to 'C-Level Executive'), with some concentration at the mid-level management position (see Table 5.3).

Table 5.3

Position-level Breakdown Associated with the SECS Normative Sample

Position	Frequency	Percentage
C-Level Executive	392	3.84
Director/Board Member	431	4.23
Divisional Leader	390	3.82

Senior Manager	1220	11.96
Middle Manager	2374	23.27
Frontline Leader	1162	11.39
Project Manager	806	7.9
Individual Contributor	2916	28.59
I would prefer not to say	509	4.99
Total	10,200	100

Industry

As can be seen in Table 5.4, the normative sample consisted of individuals across a range of industries. The modal self-nominated industry of employment was ‘education’ (14.06%) followed by ‘health and community services’ (13.16%); however, there are several industries with percentages in excess of 5% of the normative sample suggesting the presence of a diverse normative sample.

Table 5.4

Industry Breakdown Associated with the SECS Normative Sample

Industry	Frequency	Percentage
Accommodation, Cafes and Restaurants	76	0.75
Agriculture, Forestry and Fishing	142	1.39
Communication Services	277	2.72
Construction	302	2.96
Cultural and Recreational Services	151	1.48
Education	1434	14.06
Electricity, Gas and Water Supply	615	6.03
Finance and Insurance	606	5.94
Government Administration and Defence	1150	11.27
Health and Community Services	1342	13.16
I would prefer not to say	556	5.45
Information Technology	367	3.6
Manufacturing	498	4.88
Mining	408	4
Personal and Other Services	600	5.88
Property and Business Services	498	4.88
Retail Trade	760	7.45
Transport and Storage	252	2.47
Wholesale Trade	166	1.63
Total	10,200	100

Country of Residence

The normative sample is heterogeneous with respect to the country of residence of the respondents. As can be seen in Table 5.5, the normative sample is primarily based upon a total of eight industrialized countries. Australia is the single largest contributor to the normative sample (55.91%), which reflects the fact that the SECS was originally developed by Genos International which is based in Australia. However, as many 1,329 Americans and 420 British are also included in the normative sample (see Chapter 8 for cultural considerations in the application of the SECS).

Table 5.5

Country of Residence of the SECS Normative Sample

Residence	Frequency	Percentage
Australia	5,703	55.91
United States of America	1,329	13.03
United Kingdom	420	4.12
New Zealand	295	2.89
China	179	1.75
India	161	1.58
Canada	155	1.52
Hong Kong	144	1.41
Ireland	136	1.33
Finland	111	1.09
Lithuania	111	1.09
Kenya	103	1.01
Other	1353	13.31
Total	10,200	100

SECS: Descriptive Statistics and Analyses

The means, standard deviations, skew and kurtosis associated with the distribution of the SECS scores can be found in Table 5.6. The rater Total EI demonstration mean of 3.97 was associated with a standard deviation of 0.45. Thus, the coefficient of variation

associated with the SECS total scores was equal to .11 (0.45 / 3.97), which corresponds closely to the coefficient of variation associated with the Bar-On EQ-*i* normative sample (i.e., .11). Thus, the amount of spread associated with the SECS normative sample may be considered acceptable. The standard deviation of 0.45 also implies that approximately 95% of the normative sample scored between 3.09 and 4.85. Visual depictions of the distributions of the SECS scores are presented within Figure 5.2 and Figure 5.3. It can be observed that the distributions are relatively normal and symmetric.[1]

Table 5.6

Descriptive Statistics for the SECS Subscales and Total EI Scores

	Self-Ratings						Rater-Ratings					
	Importance			Demonstration			Importance			Demonstration		
	M	*SD*	Skew	*M*	*SD*	Skew	*M*	*SD*	Skew	*M*	*SD*	Skew
SA	4.18	.52	-.54	3.53	.53	.08	4.10	.37	-.33	3.87	.47	-.38
AO	4.26	.49	-.47	3.67	.56	-.03	4.13	.38	-.37	3.90	.51	-.47
AU	4.25	.48	-.57	3.58	.55	.02	4.16	.37	-.40	3.95	.47	-.39
ER	4.27	.49	-.53	3.67	.54	.02	4.16	.37	-.39	3.94	.46	-.36
SM	4.53	.43	-.89	3.70	.57	-.06	4.32	.34	-.49	4.08	.47	-.62
PI	4.40	.50	-.69	3.71	.59	.07	4.27	.39	-.52	4.06	.50	-.51
Total	4.32	.41	-.53	3.64	.47	.11	4.19	.33	-.39	3.97	.45	-.46

Note. Self-Rated data *N* = 10,200; Rater-data based on *N* = 41,682 ratings (averaged for each of the respective self-rated participant)

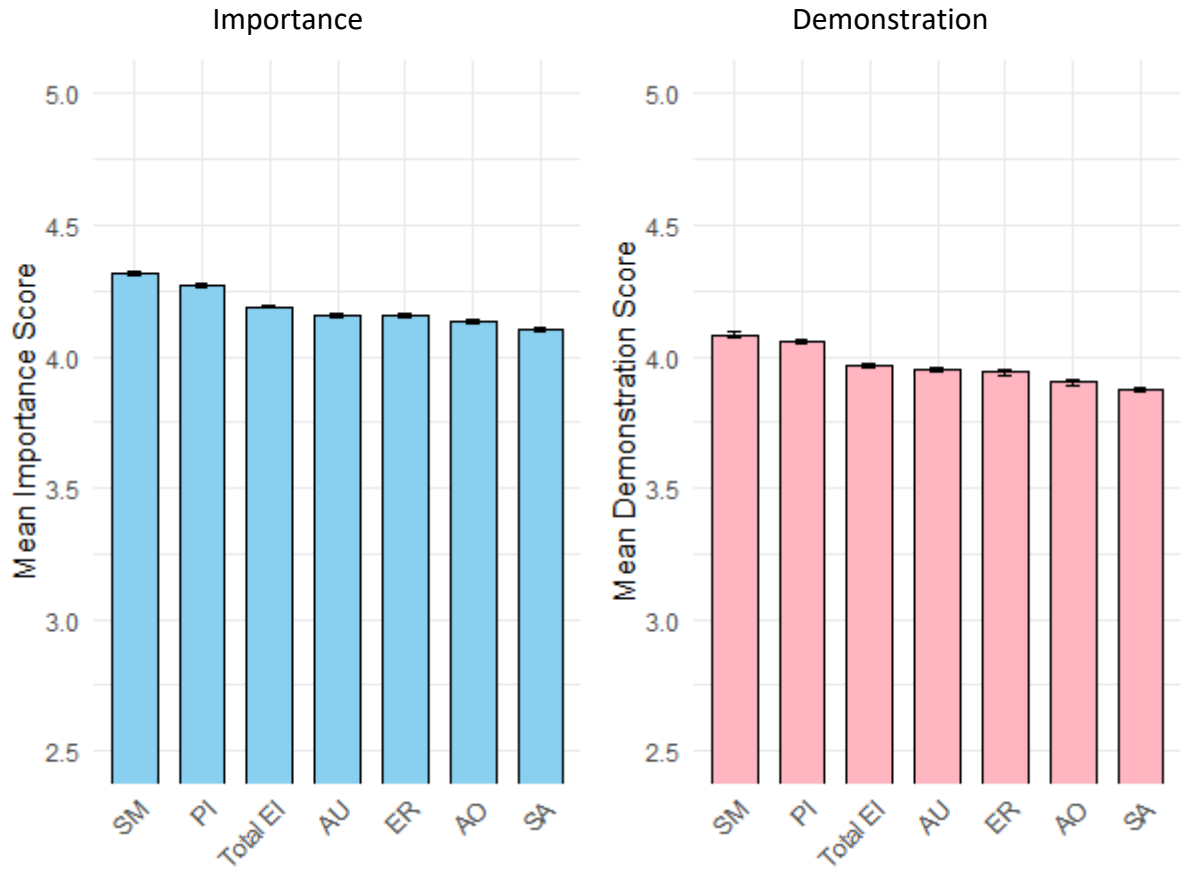
Next, the importance and demonstration subscale means (with 95% confidence intervals) were rank ordered visually in Figure 5.1. It can be seen that self-management was rated as the most important dimension by raters. Self-awareness was rated the relatively least important, however, with a mean of 4.18, it was still considered quite important.

[1] While a very small number of outlying observations were present for the self-rated scores (< 1.5), they were retained in the sample as there was no reasons to believe the scores were inaccurate and the sample size was so large (i.e., essentially no effects on the results).

Interestingly, the demonstration mean rank ordering was identical to that of the importance ratings. That is, self-management was found to be exhibited by individuals the most in the normative sample, whereas self-awareness was rated to be exhibited the least (see left side of Figure 5.1). Importantly, across all dimensions, people, on average, demonstrated the socio-emotional behaviours to a degree less than they were considered important. This suggests that while people recognize the importance of socio-emotional behaviours, they also perceive a gap between their importance and how frequently these behaviours are demonstrated. This indicates potential areas for development where individuals could benefit from support in aligning their actions more closely with the socio-emotional competencies deemed important.

Figure 5.1

Importance and Demonstration Means Rank Ordered: Rater-Ratings



N = 10,200 (*N* = 41,682 observer-ratings have been averaged for the 10,200 participants).

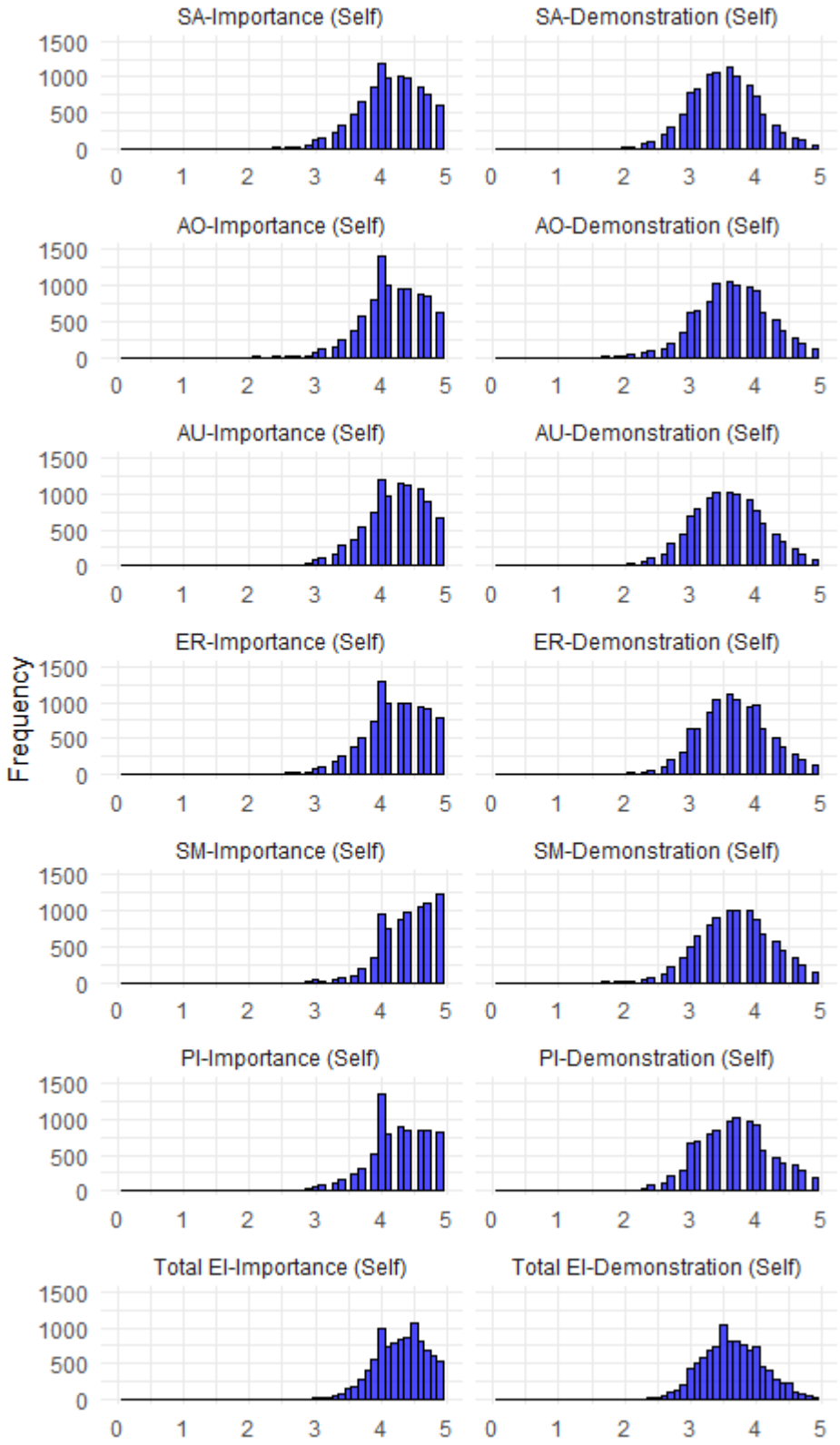
Next, we examined the distributions of each scale based on self-ratings. As shown in Figure 5.2, the importance ratings revealed a ceiling effect, particularly for self-management and positive influence, highlighting the high value individuals place on the socio-emotional characteristics assessed by the SECS. In contrast, the corresponding demonstration distributions were more normally distributed, following a bell-shaped curve.

Next, we examined the distributions of each scale based on the rater-ratings. As shown in Figure 5.3, both the importance and demonstration ratings tended to follow normal distributions. This may be partly due to averaging the rater-ratings for each participant, which likely reduced the likelihood of extreme scores. Regardless, the rater-based SECS scores were found to be consistent with largely normal distributions, which enhances the interpretability of percentile scores.

Although the mean differences between importance and demonstration ratings provided by observers were smaller than those observed in self-ratings, it remains evident that individuals are generally perceived to demonstrate socio-emotional functioning characteristics to a lesser degree than they are valued. This again underscores the potential for development efforts to bridge the gap between the importance attributed to these emotional intelligence characteristics and their actual demonstration in practice.

Figure 5.2

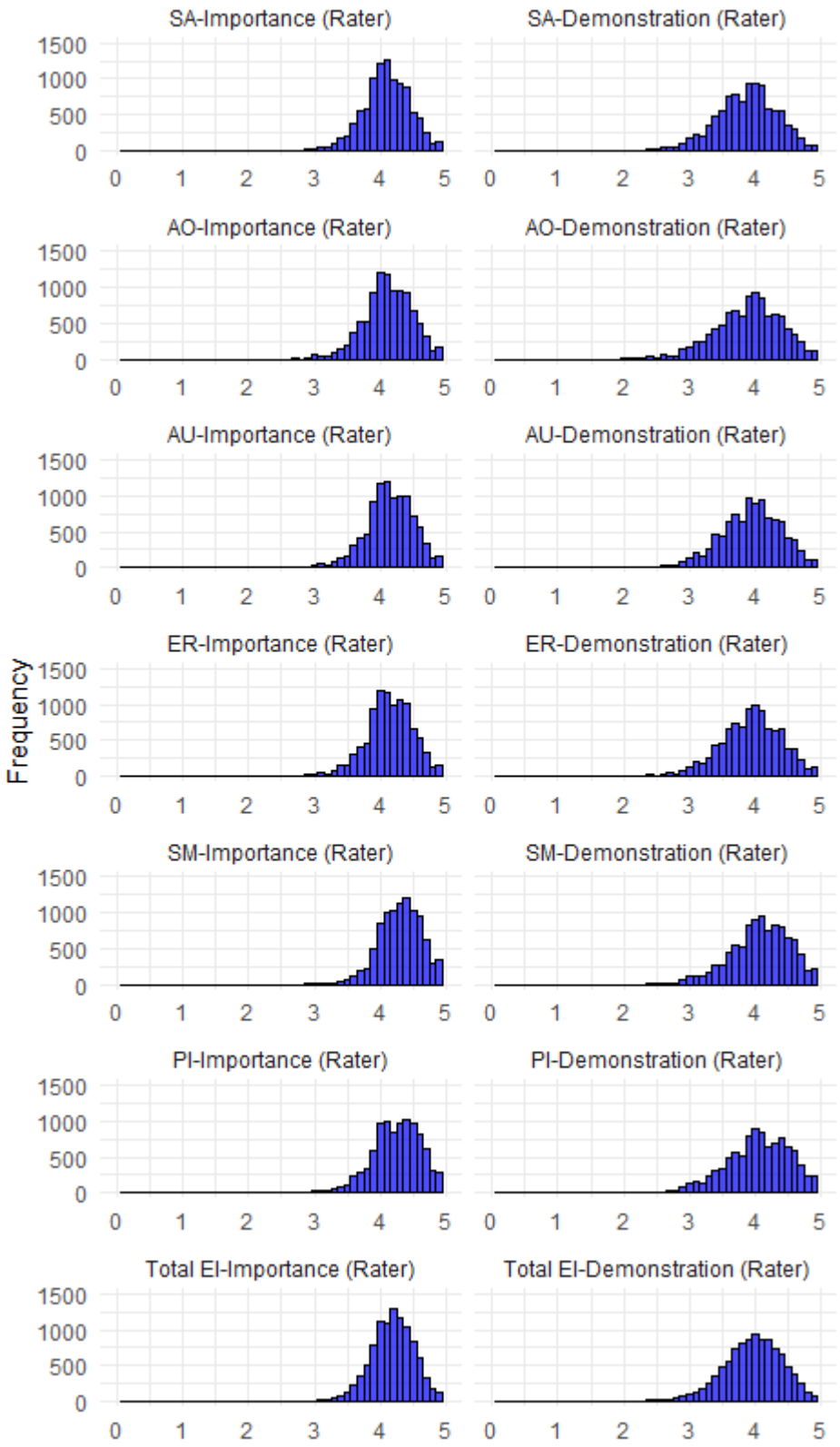
Histograms of SECS Susbcale and Total EI Scores: Self-Ratings



Note. *N* = 10,200.

Figure 5.3

Histograms of SECS Susbcale and Total EI Scores: Rater-Ratings

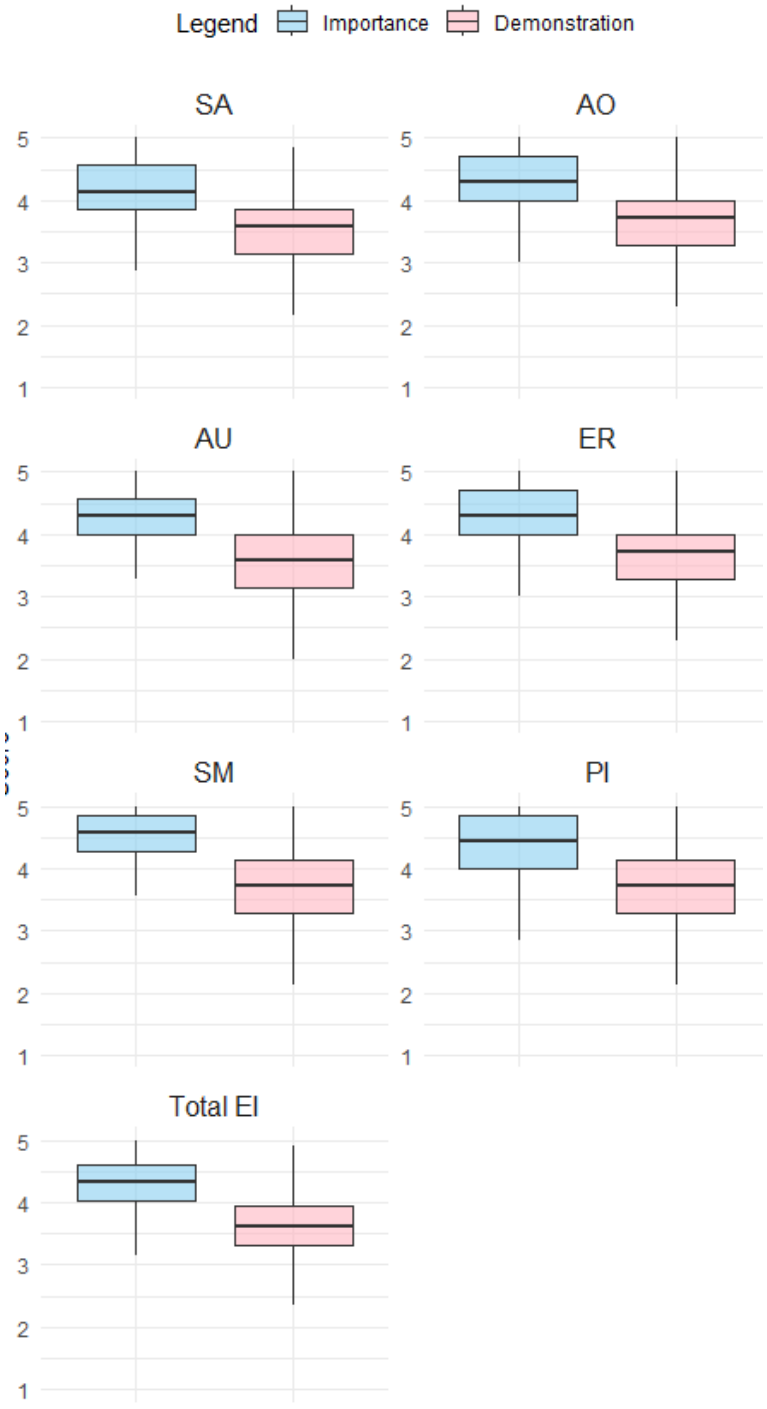


Note. *N* = 10,200 (*N* = 41,682 observer-ratings have been averaged for the 10,200 participants).

To better reveal the difference between the importance and demonstration means for the self-ratings, we generated boxplots, as can be seen in Figure 5.4. The magnitude of the differences is quite evidently large across all of the dimensions.

Figure 5.4

Box Plots Comparing Importance and Demonstration Means: Self-Ratings

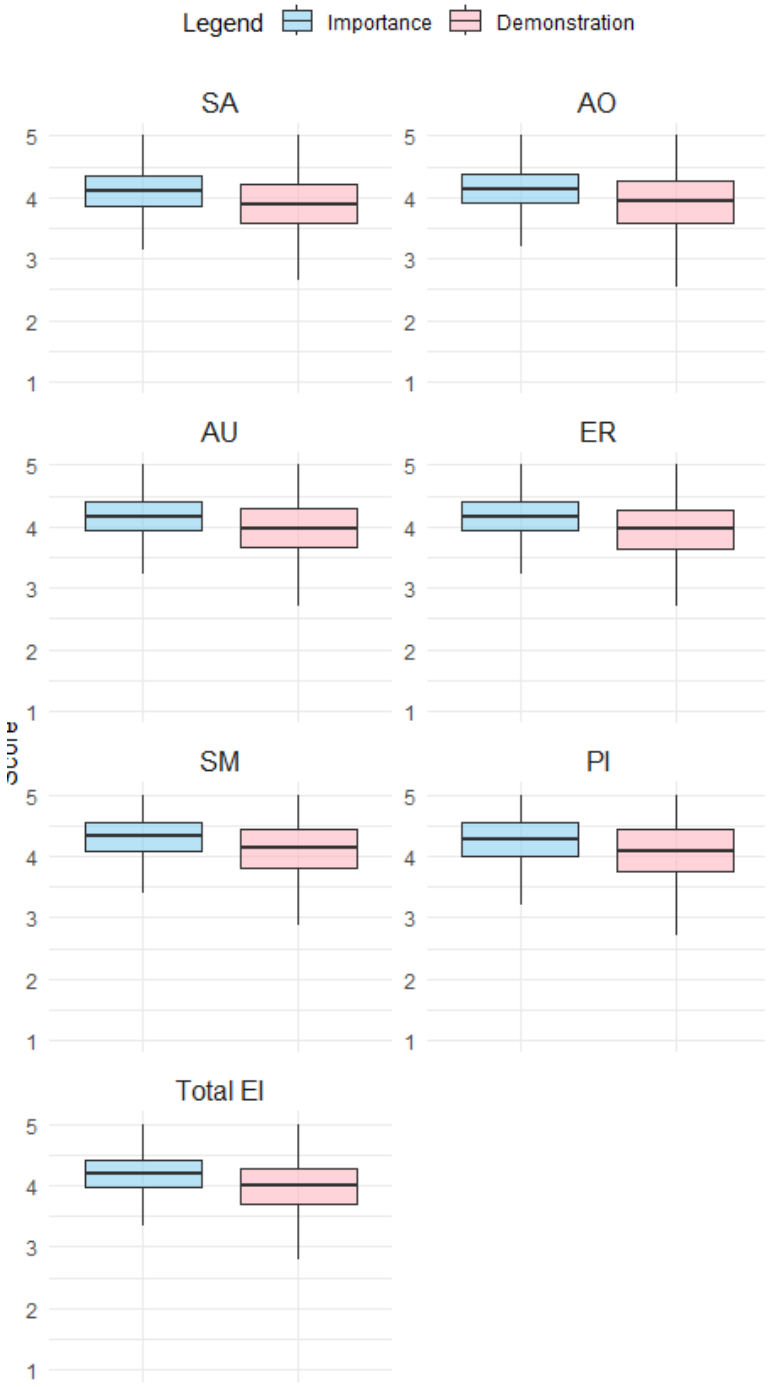


Note. *N* = 10,200; all scale mean differences statistically significant, $p < .05$.

By comparison, the differences between the importance and demonstration means for the rater-ratings as shown in boxplots are smaller, but still statistically significant, as can be seen in Figure 5.5.

Figure 5.5

Box Plots Comparing Importance and Demonstration Means: Rater-Ratings



Note. *N* = 10,200 (*N* = 41,682 observer-ratings have been averaged for the 10,200 participants); all scale mean differences statistically significant, $p < .05$.

Figure 5.6

Box Plots Comparing Demonstration Means: Self-Ratings Versus Rater-Ratings

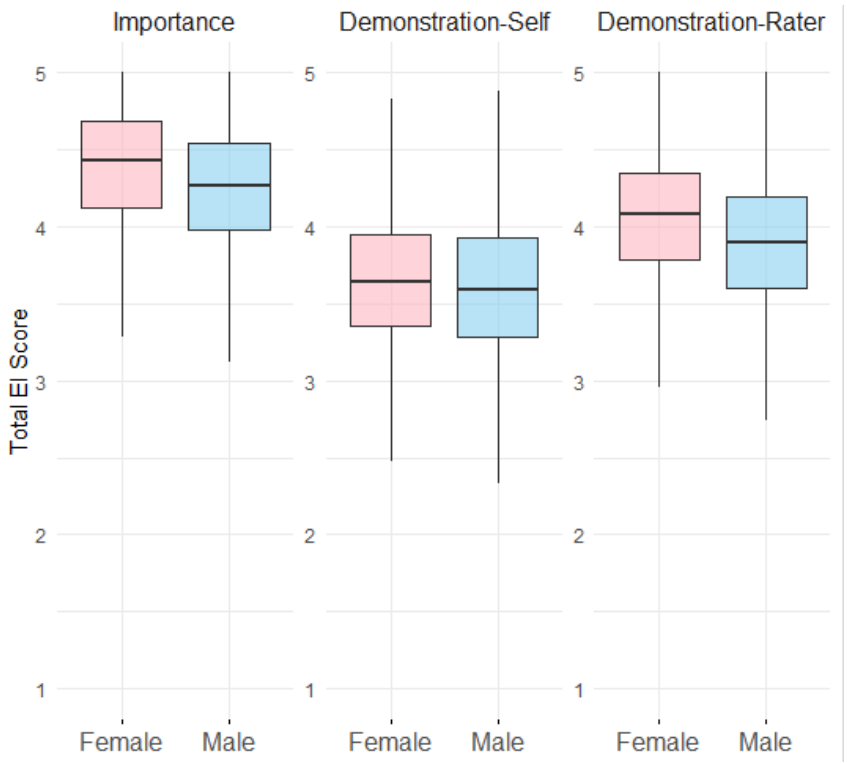
Note. *N* = 10,200 (*N* = 41,682 observer-ratings have been averaged for the 10,200 participants); all scale mean differences statistically significant, $p < .05$.

Next, a series of independent samples t-tests were conducted to examine gender differences in total SECS scores across three dimensions: Importance, Demonstration-Self,

and Demonstration-Rater. For the Importance dimension, females (*M* = 4.38) reported significantly higher scores than males (*M* = 4.25), *t*(10079) = 16.84, *p* < .001, with a small effect size, *d* = 0.33, 95% CI [0.30, 0.37]. In the Demonstration-Self dimension, females (*M* = 3.66) again reported higher scores than males (*M* = 3.62, *SD* = [value]), *t*(10107) = 4.00, *p* < .001. However, the effect size was negligible, *d* = 0.08, 95% CI [0.04, 0.12]. For the Demonstration-Rater dimension, females (*M* = 4.05) were rated significantly higher than males (*M* = 3.89), t(9976.2) = 18.55, *p* < .001, with a small effect size, *d* = 0.37, 95% CI [0.33, 0.41]. As the Cohen's *d* values between the self-reported and rater-report demonstration mean comparisons did not overlap they were statistically significantly different from each other. This effect suggests a hubris humility effect (Furnham, 2001). That is, on average, women tend not to rate their EI as higher than men, however, when rated by others, women are rated to have higher levels of EI than men (see Figure 5.7).

Figure 5.7

Gender Differences in Total EI Importance and Demonstration: Self- & Rater-Ratings



Note. *N* = 10,200 (*N* = 41,682 observer-ratings have been averaged for the 10,200 participants).

SECS Normative Sample: Overall Summary

The SECS normative sample is substantial in size and well-representative of both males and females in roughly equal proportions. It also encompasses a broad age range typical of workplace settings and includes participants from various industries and westernized/industrialized countries. Therefore, the SECS normative sample can be considered robust and appropriate for the intended applications.

As expected, on average, people tend to value the SECS dimensions more highly than they are typically observed, indicating that demonstrating these socio-emotional competencies may not be as easy as recognizing their importance.

The analysis revealed notable gender differences in SECS scores. Women consistently rated the importance of socio-emotional competencies higher than men did, and they also received higher demonstration ratings from observers. Interestingly, while women's self-ratings were only slightly higher than men's, the gap was more pronounced in the rater-ratings, suggesting that women may be more modest in self-assessment but are perceived by others to exhibit stronger socio-emotional competencies. This pattern supports the "hubris-humility effect," where women tend to underestimate their abilities compared to how they are perceived by others.

While there are observed mean differences between men and women in SECS scores, this does not indicate that the SECS is biased against women. In fact, numerous studies have shown that women generally score higher on emotional intelligence than men (Cabello et al., 2016). Moreover, since the normative sample includes a balanced representation of both genders, with roughly equal numbers of men and women, the SECS and its normative sample should be considered fair and representative. This balanced composition ensures that the SECS provides an accurate reflection of the population, making it a reliable tool for assessing socio-emotional competencies across genders.

Chapter 6: Test Score Reliability

From a psychometric perspective, the SECS was primarily developed using the 'method of rational scaling,' which relies on two key principles: (1) all items within a specific scale (or subscale) should correlate positively with each other, and (2) each item should also correlate positively with the total score of the scale (or subscale). Essentially, this method

focuses on internal consistency reliability (Gregory, 2004), a key aspect of the analysis discussed in this chapter.

Psychometric reliability focuses on estimating two main sources of variance: (1) true score variance and (2) error variance (Lord & Novick, 1968). True score variance reflects the predictable and consistent portion of variance, while error variance represents the random, unpredictable component. Ideally, test developers aim to minimize error variance in psychometric scores, though excessively high internal consistency reliability, known as the 'bloated specific' (Cattell, 1978), has been noted as a potential concern.

At its core, adequate test score reliability justifies the selection of items for creating a composite score (e.g., subscale score) and supports the interpretation of those scores as a potentially valid indicator of a specific construct (Gignac, 2009). Without reliable scores, valid interpretation of the scores as an indicator of the construct is impossible. However, high levels of reliability do not imply high validity. Other research must be conducted to establish the validity of test score interpretations, a topic covered later in the manual.

There are two primary types of reliability that are typically reported for the scores of a scale or inventory: (1) internal consistency reliability, and (2) test-retest reliability. In this chapter, internal consistency reliability and test-retest reliability estimates are provided for the SECS scores.

Internal Consistency Reliability

We estimated internal consistency reliability using the widely recognized coefficient alpha. However, we acknowledge that when the assumption of essential tau-equivalence is not met, coefficient alpha may serve as a lower-bound estimate (Raykov, 1997). Therefore, the reliability estimates presented here should be considered somewhat conservative. Researchers often reference Nunnally's guidelines for internal consistency reliability (Nunnally & Bernstein, 1994), suggesting a minimum of .70 for exploratory research, .80 for basic research, and .90 or higher for critical decision-making.

As can be seen in Table 6.1, the internal consistency reliabilities associated with all six subscales for the ‘importance’ perspective were all very good, as they ranged from .79 to .88 for the self-rated data, and .87 to .92 for the rater data. Though somewhat lower, the internal consistency reliabilities were all respectable for the demonstration data, ranging

from .76 to .86 for the self-rated data and .88 to .93 for the rater data. Finally, at the total EI score level, the reliabilities were equal to .94 or greater across importance and demonstration and self/rater data. Although the subscale scores met Nunnally's guidelines for basic research, we recommend placing greater emphasis on the total SECS scores for critical decisions, as these scores exceeded the .90 threshold.

Table 6.1

Internal Consistency Reliability: Coefficient Alphas

	Self-Ratings		Rater-Ratings	
	Importance	Demonstration	Importance	Demonstration
SA	.79	.77	.88	.91
AO	.83	.83	.90	.93
AU	.79	.76	.87	.88
ER	.80	.81	.88	.90
SM	.84	.79	.89	.89
PI	.88	.86	.92	.93
Total	.95	.94	.97	.98

Note. Self-Rated data *N* = 10,200; Rater-data *N* = 41,682; SA = Self-Awareness; AO = Awareness of Others; AU = Authenticity; ER = Emotional Reasoning; SM = Self-Management; PI = Positive Influence.

While confidence intervals can and probably should be reported for coefficient alpha, we note that the sample sizes were so large that all of the CIs corresponded to a very small range (< .03), therefore, we did not report them here.

Test-Retest Reliability

Test-retest reliability measures the stability of scores obtained from a scale or inventory over time (Gregory, 2004). While some debate exists about whether test-retest reliability truly reflects reliability - since changes in scores may indicate genuine shifts in the construct rather than measurement error - it remains essential to observe some degree of

stability in both the scores and the construct. This stability is crucial for the appropriate use and interpretation of scores from an inventory related to emotional intelligence.

Guidelines for the interpretation of test-retest reliability coefficients are much less well established than those of Nunnally's for internal consistency reliability. Cicchetti (1994) provided guidelines for interpreting test-retest reliability, classifying scores as 'excellent' at .75 and above, 'good' between .60 and .74, and 'fair' within the .40 to .59 range. Typically, test-retest reliability is assessed by having participants complete the test in two sessions, spaced 4 to 6 weeks apart. While such data for the SECS are not yet available, hundreds of participants have retaken the survey after completing an emotional intelligence improvement program. In this context, a positive correlation across time would still suggest test-retest reliability, though it would likely be a conservative estimate due to individual differences in receptivity to the program, which could reduce the correlation.

Based on a sample of 838 participants, the total EI demonstration scores showed a test-retest correlation of .57, indicating essentially 'good' reliability, while the total EI importance scores achieved a correlation of .81, corresponding to 'excellent' reliability. As shown in Table 6.2, the test-retest reliabilities were somewhat lower at the subscale level, but all remained within at least the 'fair' range according to Cicchetti's (1994) guidelines. It's important to note that these estimates are likely conservative, as the participants completed a program to improve their EI, and the degree of improvement varied among individuals.

Reliability: Summary

Overall, the scores from the SECS demonstrate respectable levels of test score reliability. Specifically, internal consistency reliability estimates exceeded .90 at the total scale level and .70 at the subscale level. From a test-retest perspective, the inventory also showed strong indications of reliability, with total scale correlations of approximately .6 for demonstration scores and .8 for importance scores.

Table 6.2

Test-Retest Reliability Correlations

	Retest Correlation	
	Demonstration	Importance
SA	.42**	.68**
AO	.53**	.75**
AU	.50**	.73**
ER	.50**	.74**
SM	.60**	.78**
PI	.56**	.80**
Total EI	.57**	.81**

Note. N = 838; **p < .001; SA = Self-Awareness; AO = Awareness of Others; AU = Authenticity; ER = Emotional Reasoning; SM = Self-Management; PI = Positive Influence.

Chapter 7: Validity

Validity is often regarded as the most crucial characteristic of scores derived from a psychometric inventory (Nunnally & Bernstein, 1994). A robust definition of validity focuses on its relevance to justifying the link between scores obtained from an inventory and the specific construct of interest (Sireci, 1998). For example, if one infers that a set of scores from an inventory accurately represents the construct of emotional intelligence, this inference must be supported by various instances of validity research. More generally, validity is commonly described as the extent to which an inventory measures what it is intended to measure. In the context of emotional intelligence (EI), validating an EI measure essentially involves demonstrating that the scores truly reflect an individual's EI level.

The primary types of empirically based validity research typically include factorial validity, concurrent validity, discriminant validity, and predictive validity. Additionally, non-empirical methods such as face validity and content validity also play critical roles in assessing psychometric validity. Together, these different types of validity contribute to the overall construct validity. In psychology, a construct is defined as a theoretical and unobservable attribute of behaviour or cognition that varies among individuals (Messick, 1995).

In the context of the Genos model socio-emotional functioning in the workplace, emotional intelligence is operationalized through six dimensions associated with identifying, using, and managing emotions. This chapter provides a comprehensive review of the validity of the SECS(W) scores—both overall and across the six subscales.

Face Validity

Face validity, often regarded as the least sophisticated and least valued form of validity, refers to the extent to which the items of an inventory appear, at face value, to measure the attribute of interest (Cohen & Swerdlik, 1999). Although face validity is typically considered of limited significance in the rigorous assessment of psychometric measures, it can play a crucial role in applied contexts, particularly when respondent motivation is important (Kaplan & Saccuzzo, 2005). If respondents perceive that the items in a test do not align with its intended purpose, their engagement and satisfaction with the assessment process may diminish.

Face validity can be superficially assessed by reviewing the content of the items (Kaplan & Saccuzzo, 2005). As noted earlier in this manual, the SECS is designed to measure how well an individual demonstrates social and emotion competence via their behaviour. For the SECS to exhibit high face validity, its items should clearly relate to social-emotional behaviours and competencies. An examination of the items (see Appendix A) confirms that all SECS items are contextually tied to how well an individual demonstrates social and emotion competence via their behaviour. Therefore, it can be concluded that the SECS possesses high face validity.

Content Validity

Content validity concerns the extent to which the items and subscales within an inventory accurately represent the full scope of the construct being measured (Kaplan & Saccuzzo, 2005). Like face validity, content validity is typically not assessed through quantitative methods but rather through logical and theoretical analysis. In certain areas of psychology, addressing content validity is relatively straightforward. For example, when evaluating a test designed to assess students' mastery of the material in a specific academic unit, items can be systematically drawn from the different content sections covered

throughout the course. An instructor might, for instance, generate five questions corresponding to each of the 12 weeks of instruction.

Evaluating content validity for a construct like emotional intelligence is more challenging because it lacks clear boundaries that distinguish relevant content from non-content, unlike a well-defined academic unit. As a result, the content validity of an EI measure can best be assessed in relation to the theoretical framework and model on which it is based. As discussed in a previous chapter, the SECS builds on its predecessors—the SUEIT and Genos EI—which were developed through a thorough analysis aimed at identifying the common dimensions across several widely used EI measures of that era. The SECS framework has been articulated as reflecting emotionally intelligent behaviours across six key dimensions of socio-emotional functioning: self-awareness, awareness of others, emotional reasoning, authenticity, self-management, and positive influence. Each dimension is measured by seven distinct items, which together suggest that the SECS provides comprehensive coverage of the socio-emotional functioning construct, supporting its content validity. That is, few would contend that the dimensions measured by the SECS are not relevant to socio-emotional functioning.

From this perspective, the Genos EI SECS model can be considered sufficiently comprehensive, as it was developed with consideration of a wide range of potential EI dimensions. Importantly, the model was deliberately designed to exclude personality-related dimensions and common work-based competencies, such as customer service. Instead, the Genos EI SECS model aims to represent a focused and coherent construct of socio-emotional functioning. In other words, the model intentionally omits behaviours that may correlate with emotional intelligence (e.g., customer service, optimism) but are not central to the construct itself (see Smith & McCarthy, 1995, for a discussion on prototypical constructs). The dimension names and items within the SECS are thus argued to accurately reflect the content of a theoretically grounded construct of emotional intelligence.

In summary, the SECS contains several items designed to measure all six of the primary dimensions of the Genos EI model. Further, the Genos EI model emerged through a comprehensive analysis of several other putative measures of EI, as well as theoretical considerations to restrict the model from not incorporating obvious personality dimensions and/or extra-relevant competencies. For these reasons, it is believed that the SECS, like its predecessors, is associated with a respectable level of content validity.

Factorial Validity: Confirmatory Factor Analysis

Confirmatory factor analysis is best applied in a model comparison approach (). Consequently, in order to evaluate the factorial validity associated with the SECS, we tested a single-factor model and higher-order model with six first-order factors corresponding to the theorised dimensions. Evidence in favour of the SECS measuring six subdimensions would be present if the six-factor model fit better than the single-factor model and the first-order factor residuals were all statistically significant.

It is well-established (see Ximénez et al., 2022, for example) that incremental fit indices often exhibit a conservative bias when the model contains a large number of observed variables (more than 36) and the sample size is substantial (over 1,000), both of which are conditions met by our investigation here.

Consequently, as recommended by Kenny and McCoach (2003), for the purposes of evaluating model close-fit, we focussed primarily upon two absolute close-fit indices, RMSEA and SRMR (expectation of .06 or less to indicate an acceptable model; Hu & Bentler, 1999). However, we also consulting two incremental close-fit indices, TLI and CFI, though we used an expectation of .80 to .85 to indicate a satisfactory level of model close-fit, rather than the more commonly used .90 to .95 criteria (Hu & Bentler, 1999).

The single-factor model was associated with unacceptable levels of model close-fit, $\chi^2(819) = 43{,}743.47$, $p < .001$, RMSEA = .072, SRMR = .056, TLI = .745, CFI = .757. Though all of the items loaded positively and significantly on the general factor of EI, the lack of model close-fit associated with the incremental fit indices (TLI and CFI) suggested that more than one factor was measured by the SECS.

Next, we tested the theorised higher-order model, which yielded improved levels of model close-fit, $\chi^2(813) = 32{,}710.50$, RMSEA = .062, SRMR = .051, TLI = .809, CFI = .820. Although the incremental fit indices indicated some misfit (i.e., values below .850), the model demonstrated a significant practical improvement, with a TLI increase of .064, far surpassing Gignac's (2007) criterion for practical improvement of ΔTLI = .010. An examination of the modification indices suggested that the inclusion of five correlated residuals may improve model close-fit.[2] With the inclusion of those five correlated residuals, the model fit improved, $\chi^2(808) = 26{,}765.78$ RMSEA = .056, SRMR = .048, TLI = .844, CFI =

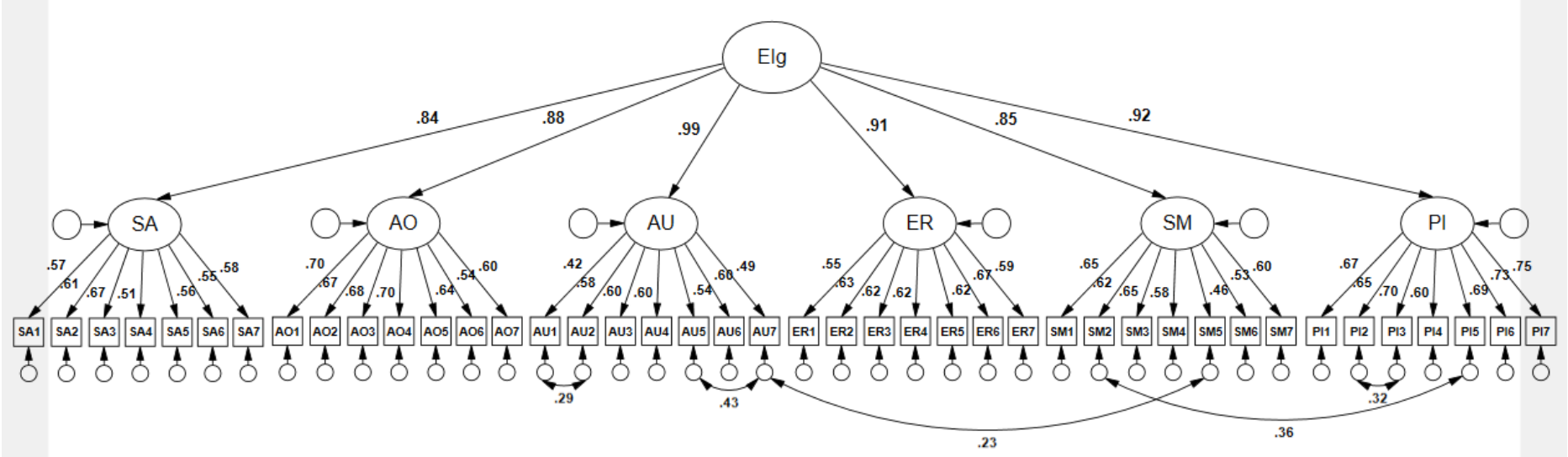
[2] Between the following items: AUq5 and AUq7; SMq2 and PIq5; AUq7 and SMq5; PIq2 and PIq3; AUq1 and AUq2.

.853, suggesting an acceptably well-fitting model based on our criteria. The correlations between the five item residual terms ranged between .23 to .43 (all $p < .001$).

As can be seen in Figure 7.1, all six dimensions yielded substantial, positive loadings onto the EI general factor, ranging from .86 to .99 (all $p < .001$). Importantly, five of the six first-order factor residuals were statistically significant (SA: $S^2 = .06$, $z = 23.37$, $p < .001$; AO: $S^2 = .07$, $z = 27.45$, $p < .001$; AU: S^2 .01, $z = 1.06$, $p = .288$; ER: $S^2 = .03$, $z = 19.42$, $p < .001$; SM: $S^2 = .08$, $z = 26.01$, $p < .001$; PI: $S^2 = .04$, $z = 23.11$, $p < .001$; all $p < .001$), suggesting some unique, true score variance associated with five of the six dimensions. The very large AU higher-order loading may be interpreted to suggest that Authenticity is highly central to the overarching Emotional Intelligence construct, contributing predominantly to the general EI factor, with minimal unique variance that isn't accounted for by the general factor itself.

Figure 7.1

Higher-Order Model of EI: SECS Self-Ratings



Note. *N* = 10,200; SA = Self-Awareness; AO = Awareness of Others; AU = Authenticity; ER = Emotional Reasoning; SM = Self-Management; PI = Positive Influence; EIg = general emotional intelligence; all loadings and residual correlations significant at $p < .001$.

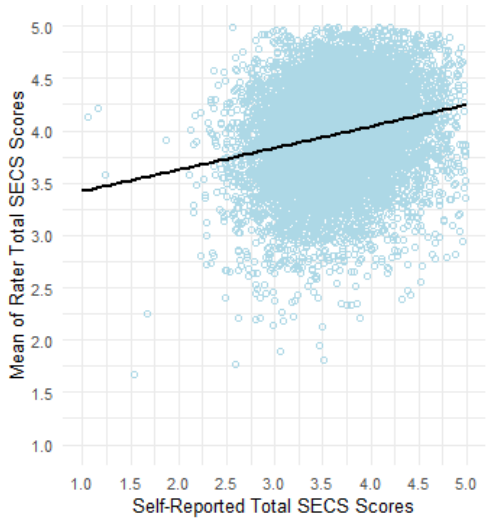
Consensual Validity

One approach to evaluating the validity of questionnaire test scores is to assess the convergence between self-ratings and observer (rater) ratings. While we do not expect a high degree of convergence, as individuals often lack objective insight into their own behavioural tendencies, finding some statistical agreement between self and observer ratings can indicate that both measures capture a common underlying construct. This notion of consensual validity (Eysenck, 2014) suggests that even partial convergence may, in this case, reflect a shared assessment of socio-emotional competence. This is why the SECS primarily emphasizes rater ratings over self-ratings in its measurement of socio-emotional functioning.

Consequently, the degree to which there was convergence between the self-rated demonstration scores and the rater (observer) demonstration scores was tested next. Based on a series of Pearson correlations, it was found that there was statistically significant consensual validity across all six SECS subdimensions, as all of the correlations were positive and statistically significant: SA: r = .19, 95% CI [.17, .19], p < .001, AO: r = .22, 95% CI [.20, .22], p < .001; AU: r = .21, 95% CI [.19, .21], p < .001; ER: r = .15, 95% CI [.13, .15], p < .001; SM: r = .19, 95% CI [.17, .19], p < .001; PI: r = .23, 95% CI [.21, .23], p < .001. A visual appreciation of the association for the total EI scores can be seen in Figure 7.2.

Figure 7.2

Scatter Plots Depicting the Associations between Self-Rated and Rater SECS Scores



Note. N = 10,200 (N = 41,682 observer-ratings have been averaged for the 10,200 participants).

Convergent Validity

Convergent validity refers to the degree to which the scores of the inventory of interest correlate with scores from other measures that are theoretically expected to be related, whether these are psychometric or non-psychometric (Gignac, 2009). Within the broader concept of convergent validity, two primary types can be distinguished: concurrent validity and predictive validity. The key difference between these two lies in the timing of the measurement of the dependent variable (Gignac, 2009). Specifically, concurrent validity is assessed when both the independent and dependent variables are measured simultaneously. In contrast, predictive validity is tested when the dependent variable is measured after a significant period following the measurement of the independent variable, allowing for the prediction of future outcomes. To date, the SECS has been investigated for concurrent validity fairly extensively, as we describe next.

Study 1: Genos EI, Personality & Engagement

Measures assessing the same constructs are expected to correlate positively (Campbell & Fiske, 1959). The SECS was designed to measure individual differences in social and emotional functioning in the workplace. Therefore, scores from the SECS should correlate positively with other measures of emotional intelligence. The Genos EI Inventory, a well-established self-report measure of emotional intelligence (Palmer et al.,2009; Gignac, 2010a, 2010b), is considered a predecessor to the SECS, despite substantial revisions to the SECS items. Therefore, a strong positive correlation between the SECS and Genos EI scores is anticipated. A lack of such a correlation would raise concerns about the validity of the SECS.

In addition to correlating with other measures of emotional intelligence, the SECS is expected to show associations with personality traits, though not to the extent that would indicate construct redundancy. The Big Five personality traits—openness, conscientiousness, extraversion, agreeableness, and neuroticism—are key dimensions of the Five-Factor Model. Emotional intelligence (EI), particularly when assessed through self-report mixed-model measures, reflects a range of emotional and social competencies. Drawing on academic research (e.g., McCrae, 2000; van der Zee et al., 2002), several hypothesized correlations between personality traits and EI can be anticipated.

First, consider extraversion, a trait characterized by sociability, assertiveness, and a tendency to seek out social interactions. Individuals high in extraversion are likely to score higher on measures of emotional intelligence, particularly in areas related to social awareness and relationship management. This is because extraverted individuals often have better interpersonal skills and are more adept at navigating social situations.

Next, Neuroticism is a trait characterized by emotional instability, anxiety, and moodiness. It is generally hypothesized to have a negative correlation with emotional intelligence. Individuals high in neuroticism may struggle with emotional regulation and may be less adept at managing stress and understanding their own emotional states, which are key components of emotional intelligence.

Agreeable individuals are typically cooperative, compassionate, and empathetic. These qualities are closely aligned with emotional intelligence, especially in terms of empathy and relationship-building skills. Therefore, a positive correlation between agreeableness and emotional intelligence is expected, as both involve understanding and responding appropriately to the emotions of others.

Conscientiousness involves being organized, dependable, and disciplined. Conscientious individuals may exhibit higher emotional intelligence in terms of self-regulation and motivation, as they are likely to be more aware of their emotions and better at managing them to achieve personal goals.

Openness is associated with creativity, curiosity, and a willingness to experience new things. While the direct relationship between openness and emotional intelligence might be less pronounced than with other traits, individuals high in openness may have a greater capacity for understanding complex emotional experiences and appreciating diverse perspectives, which can enhance certain aspects of emotional intelligence.

Thus, drawing from both theoretical foundations and previous empirical research (McCrae, 2000; van der Zee et al., 2002), we can anticipate a specific pattern of correlations between the SECS and the Big Five personality traits. Observing these expected correlations would provide support for the convergent and concurrent validity of the SECS.

In light of the above, the SECS was administered to a sample of participants. The internal consistency reliability (coefficient alpha) for the total scores in our sample was .95. Furthermore, the SECS was administered alongside the Genos EI 14-item short-form (α = .85), which has been shown to correlate highly with the Genos EI long form (r = .94; Palmer

et al., 2009). Given the substantial validity evidence supporting the Genos EI Inventory (Gignac, 2010a; 2010b), a positive correlation between SECS scores and Genos EI scores would provide strong evidence of the SECS's validity.

To measure personality, the participants completed Saucier's 40-item mini marker set (Saucier, 1994). In this questionnaire, participants rated 40 adjectives, with eight items corresponding to each of the five dimensions: extraversion, agreeableness, conscientiousness, neuroticism, and openness. Each item was rated on a 9-point Likert scale, ranging from 1 ('extremely inaccurate') to 9 ('extremely accurate'), allowing participants to express how accurately each adjective described them. In our sample, the internal consistency reliabilities were: neuroticism α = .82, extraversion α = .83, openness α = .79, agreeableness α = .75, and conscientiousness α = .82.

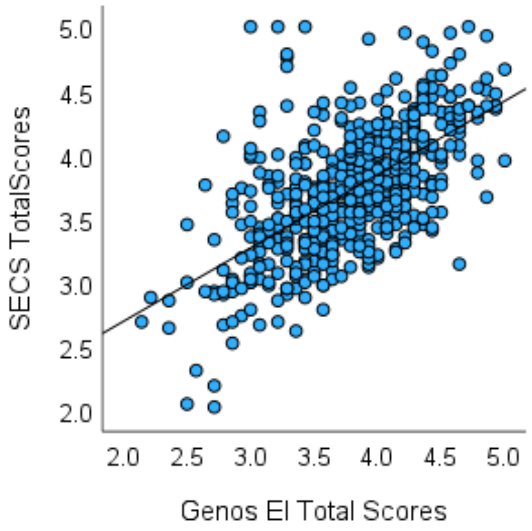
The sample consisted of 530 primarily Australian adult participants (82.1% Australian; 4.5% American; 3.2% British; 10.2% other countries) who completed the testing between November 2015 and February 2016. The mean age was 41.08 (*SD* = 12.67) and 57.9% were female. The sample was relatively educated (e.g., 27% bachelor's degree; 26.6 master's degree) and employed across a diversity of industries. No outliers were identified based on the inter-quartile range rule with a 3.0 multiplier.

First, the SECS total scores (*M* = 3.72; *SD* = 0.50) correlated (Pearson) at r = .62, p < .001 with the Genos EI total scores (*M* = 3.78; *SD* = 0.53). Such a positive correlation implies a strong degree of correspondence between the two measures, indicating that the SECS effectively captures core elements of emotional intelligence as assessed by the established Genos EI inventory. This finding provides substantial evidence for the convergent validity of the SECS, suggesting that it is a valid tool for measuring social and emotional functioning in line with existing validated instruments.

However, it is important to note that a correlation of .62 indicates that the two measures share approximately 40% of their variance, leaving about 60% of the variance unique to each measure. This suggests that while the SECS aligns well with the Genos EI inventory, it is not redundant and captures additional aspects of socio-emotional functioning that are distinct from those measured by the Genos EI inventory. A visual appreciation of the association can be seen in Figure 7.3.

Figure 7.3

Scatter Plot Depicting the Association between Genos EI and SECS Total Scores



Note. *N* = 530.

Next, the correlations between the SECS and the Big Five personality dimensions generally aligned with the theoretical predictions and provide evidence supporting the convergent validity of the SECS. Specifically, the SECS demonstrated a moderate positive correlation with Extraversion (r = .43, p < .001), consistent with the expectation that individuals who are more outgoing and sociable are likely to score higher on emotional intelligence. This correlation was similar to the one observed with the Genos EI inventory (r = .44, p < .001), indicating that both measures similarly capture the relationship between emotional intelligence and extraversion.

In terms of Neuroticism, the SECS showed a moderate negative correlation (r = -.27, p < .001), suggesting that individuals with higher emotional stability (lower neuroticism) tend to score higher on emotional intelligence. Although this correlation is in the expected direction, it is weaker compared to the stronger negative correlation found with the Genos EI inventory (r = -.55, p < .001). This difference may reflect variations in how emotional intelligence is conceptualized or measured by the two instruments, with the Genos EI inventory showing a more pronounced relationship with emotional stability.

The SECS also correlated positively with Openness (r = .41, p < .001), supporting the idea that individuals who are more open to experience and intellectually curious tend to

exhibit higher emotional intelligence. This finding is consistent with the correlation observed with the Genos EI inventory (r = .34, p < .001).

Regarding Agreeableness, the SECS showed a strong positive correlation (r = .49, p < .001), which aligns with the expectation that individuals who are more cooperative, empathetic, and kind are likely to have higher emotional intelligence. This correlation is somewhat lower than the correlation with the Genos EI inventory (r = .59, p < .001), indicating that while both measures reflect this relationship, the Genos EI inventory might be slightly more substantially imbued with personality variance.

Lastly, the SECS correlated positively with Conscientiousness (r = .34, p < .001), indicating that individuals who are more organized, dependable, and disciplined also tend to have higher emotional intelligence. This correlation is somewhat weaker than the one found with the Genos EI inventory (r = .47, p < .001), suggesting that while conscientiousness is related to emotional intelligence, the strength of this relationship may vary depending on the measure used.

Overall, these correlations provide evidence of convergent validity for the SECS, as it shows meaningful associations with the Big Five personality dimensions in ways that are theoretically consistent. The notable differences in the strength of correlations between the SECS and the Genos EI inventory highlight that while the two measures are related, they may capture slightly different aspects of emotional intelligence, particularly in relation to neuroticism and conscientiousness. In particular, the SECS may be considered somewhat more divergent to personality than the Genos EI measure, which may be regarded as an attractive characteristic. Specifically, the average (absolute) correlation between the Genos EI inventory and the five personality dimensions was .48, whereas the corresponding average correlation for the SECS was .39.

Table 7.1

Pearson Correlations Between EI and Personality

	SECS	Genos EI
Extraversion	.43	.44
Neuroticism	-.27	-.55
Openness	.41	.34
Agreeableness	.49	.59
Conscientiousness	.34	.47
Avg.	.34	.47

Note. *N* = 530; SECS = total scores; Genos EI = total scores; all correlations were significant, p < .001.

Incremental Predictive Validity

In addition to convergent validity, newly proposed measures should show incremental predictive validity, which represents the ability of the new measure to explain additional variance in an outcome beyond what is already explained by existing, established measures (Hunsley & Meyer, 2003). Incremental predictive validity demonstrates that the new measure provides unique information that is not redundant with or captured by prior measures. It assesses whether the new measure can uniquely predict important outcomes, such as job performance, turnover, or other key organizational variables, even after controlling for the effects of other relevant predictors. Establishing incremental predictive validity is crucial for justifying the use of a new measure, as it indicates the new measure has added value and utility beyond what is provided by existing assessment tools.

In order to evaluate the incremental predictive validity of the SECS, the study used the Genos Employee Engagement Survey to measure employee engagement. This survey assesses engagement across four dimensions - Praise, Persist, Perform, and Perfect - with two items per dimension: (1) Praise, the recognition and appreciation employees receive for their contributions (α = .95); (3) Persist, the determination and resilience an employee demonstrates when facing challenges (α = .81); (3) Perform, the level of dedication and effort an employee puts into their work (α = .65); and (4) Perfect, the pursuit of excellence and continuous improvement in skills and work quality (α = .90). Each survey item was rated on an 8-point scale from "Absolutely Disagree" to "Absolutely Agree".

Theoretically, socio-emotional functioning should associate positively with employee engagement, because employees who are better able to recognize, understand, and manage their own and others' emotions are likely to be more engaged at work (Barreiro & Treglown, 2020). Effective socio-emotional skills enable employees to build stronger interpersonal relationships, regulate their reactions to workplace stressors, and maintain a positive, motivated outlook (Deshwal, 2015; Gangai & Agrawal, 2018). Employees high in socio-emotional competence may experience greater job satisfaction, organizational commitment, and a sense of purpose, all of which are hallmarks of engaged workers. Additionally, socio-emotionally competent employees are better equipped to collaborate productively, provide excellent customer service, and contribute creatively - all behaviors that reflect high levels of engagement. Thus, evidence for the SECS as a measure of socio-emotional functioning that demonstrates incremental predictive validity in explaining unique variance in employee engagement beyond what is accounted for by the core engagement dimensions captured in the Genos survey, would be valuable. As we did not have any theories to suggest that the SECS would show greater incremental validity for any particular engagement dimension, we conducted the analyses for the total engagement scores (α = .91).

To evaluate statistically the incremental predictive validity of the SECS beyond Genos EI, we conducted a multiple regression with total engagement scores as the dependent variable and the SECS and Genos EI total scores as the independent variables. The analysis found that the SECS predicted engagement scores uniquely, i.e., above and beyond the Genos EI scores. Specifically, the SECS had a standardized beta-weight of .33, $p < .001$ and the Genos EI inventory had a standardized beta-weight of .23. The corresponding semi-partial correlations were .26 and .18, respectively. In combination, the SECS and the Genos EI inventory accounted for 25.6% of the variance in employee engagement (multiple R = .51, $p < .001$).

These findings indicate that both higher socio-emotional functioning and higher emotional intelligence associate positively with greater employee engagement. Importantly, the SECS demonstrated a numerically stronger contribution to the regression equation compared to the Genos EI measure (β = .26 vs. .18). This provides evidence supporting the incremental predictive validity of the SECS - it was able to explain unique variance in engagement beyond what was accounted for by the established Genos EI survey. This

underscores the potential value and utility of the SECS as a complementary measure of socio-emotional competencies relevant to the workplace (see Table 7.2 for the descriptive statistics and all of the correlations between the variables noted in this section of the manual).

In summary, this study aimed to evaluate the validity of the Social and Emotional Competence Survey (SECS) by examining its relationships with the Genos EI Inventory and the Big Five personality traits. The SECS showed strong positive correlations with the Genos EI scores, supporting its convergent validity as a measure of socio-emotional competence. Additionally, the SECS demonstrated expected correlations with the Big Five traits, further reinforcing its validity. Notably, the SECS exhibited less overlap with personality traits compared to the Genos EI, suggesting that it captures distinct aspects of emotional intelligence. The study also found that the SECS predicted employee engagement beyond what was explained by the Genos EI, providing evidence for its incremental predictive validity. These findings highlight the SECS as a valuable tool for assessing socio-emotional competencies in the workplace.

Table 7.2

Pearson Correlations and Descriptive Statistics for SECS, EI, Convergent and Incremental Validity Variables

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	*M*	*SD*	Skew
1. SECS Total	1.0																	3.72	.50	-.03
2. SECS-SA	.80	1.0																3.64	.57	-.04
3. SECS-AO	.82	.58	1.0															3.81	.62	-.39
4. SECS-Auth	.84	.68	.60	1.0														3.62	.61	-.17
5. SECS-ER	.85	.64	.65	.66	1.0													3.77	.58	-.23
6. SECS-SM	.78	.54	.50	.60	.59	1.0												3.65	.61	-.04
7. SECS-PI	.86	.55	.70	.63	.70	.65	1.0											3.82	.62	-.09
8. Genos EI Total	.62	.46	.52	.49	.51	.53	.55	1.0										3.78	.53	-.18
9. Extraversion	.43	.34	.30	.42	.31	.36	.40	.44	1.0									5.83	1.34	-.10
10. Neuroticism	-.27	-.19	-.18	-.23	-.18	-.37	-.20	-.55	-.31	1.0								4.22	1.36	.19
11. Openness	.41	.33	.34	.35	.38	.27	.34	.34	.31	-.07	1.0							6.49	1.16	-.22
12. Agreeableness	.49	.36	.49	.39	.39	.34	.47	.59	.37	-.57	.21	1.0						6.71	1.11	-.35
13. Conscientiousness	.34	.23	.24	.31	.20	.38	.30	.47	.18	-.39	.17	.42	1.0					6.80	1.17	-.44
14. Praise	.39	.34	.26	.36	.32	.36	.31	.33	.31	-.22	.13	.29	.10	1.0				5.55	1.75	-.73
15. Persist	.31	.26	.17	.28	.24	.31	.26	.25	.23	-.20	.07	.19	.03	.73	1.0			5.11	1.80	-.34
16. Perform	.47	.37	.35	.37	.41	.40	.44	.46	.33	-.22	.27	.38	.21	.64	.65	1.0		6.12	1.33	-.64
17. Perfect	.47	.40	.33	.36	.44	.38	.43	.50	.33	-.22	.38	.35	.23	.49	.46	.75	1.0	6.43	1.31	-.95
18. Engagement Total	.47	.39	.32	.40	.40	.42	.41	.44	.35	-.25	.23	.35	.15	.87	.87	.88	.76	5.80	1.31	-.52

Note. *N* = 530; SECS = Social and Emotional Competence Survey; Self-Awareness; AO = Awareness of Others; AU = Authenticity; ER = Emotional Reasoning; SM = Self-Management; PI = Positive Influence; EIg = general emotional intelligence; all correlations greater than |.09| were statistically significant, $p < .05$.

Study 2: SECS, Mindfulness, Resilience, and Occupational Stress

Socio-emotional competence, as measured by the SECS, encompasses a range of skills essential for effectively managing emotions, understanding the emotions of others, and navigating social interactions in the workplace. Given its focus on emotional regulation and interpersonal effectiveness, it is anticipated that the SECS will correlate positively with both mindfulness and resilience.

Mindfulness, particularly the dimension of "Act with Awareness," involves being fully present and attentive to one's actions, which is closely related to the self-awareness and emotional regulation components of socio-emotional competence. Individuals who score higher on mindfulness are likely to be more attuned to their emotions and better able to manage them in real-time, thereby enhancing their overall socio-emotional functioning.

Similarly, psychological resilience—the ability to adapt to and recover from adversity—shares common ground with socio-emotional competence. Resilient individuals are often more adept at managing stress, maintaining emotional stability, and fostering positive relationships, all of which are key aspects of socio-emotional competence. Therefore, a positive correlation between SECS scores and resilience is expected.

Occupational stress, defined as the physical and emotional strain arising from job-related demands and pressures, was measured using the Occupational Stress Inventory (Osipow & Spokane, 1998). While the full inventory assesses 14 sub-dimensions of occupational stress, this investigation focused on three specific subdimensions: Role Overload, Psychological Strain, and Self-Care. Theoretically, different correlations would be expected between the SECS and these three dimensions, as we explain next.

First, role overload refers to the stress experienced when job demands exceed the individual's capacity to meet them, often leading to feelings of being overwhelmed. Example items from this subscale include statements such as “At work, I am expected to do too many different tasks in too little time,” “I have to take work home with me,” and “I am expected to do more work than is reasonable.” Given that Role Overload primarily reflects external job demands rather than an individual's emotional or social competence, it is less likely that the SECS will correlate with this subdimension. In fact, a lack of correlation here could serve as evidence of divergent validity for the SECS, indicating that it does not simply capture

general work-related stress but is more specifically related to emotional and social competencies.

In contrast, the psychological strain dimension captures the emotional and mental stress that arises from work-related pressures, reflecting the toll these demands take on an individual's psychological well-being. Given that the SECS is designed to measure socio-emotional competence, which includes the ability to manage stress and maintain emotional stability, a negative correlation between SECS scores and psychological strain is expected. This would suggest that individuals with higher socio-emotional competence are better equipped to handle workplace pressures without succumbing to psychological strain.

Finally, the self-care subdimension pertains to the practices and behaviours individuals engage in to manage stress and maintain personal well-being amidst workplace demands. Since socio-emotional competence involves skills such as emotional regulation and self-management, it is anticipated that higher SECS scores will be positively correlated with self-care. This would indicate that individuals with greater socio-emotional competence are more likely to engage in effective self-care practices, thereby reducing their overall stress levels, in theory.

To test the above hypotheses, data were collected from a large sample of 1,742 employees working for Tasmania’s (Australia) Worksafe department. Worksafe is a government agency responsible for promoting and ensuring workplace health and safety, overseeing compliance with occupational safety regulations, and providing support and resources to both employers and employees to maintain safe working environments.

The sample included 32% males, 67.7% females, and 0.7% who preferred not to say or identified as other. Participants' ages ranged from 17 to 73 years, with a mean age of 46.2 years (SD = 10.8). In order to evaluate the concurrent validity of the SECS, in addition to the SECS, employees rated surveys to measure employee engagement, mindfulness, psychological resilience, and occupational stress. We describe the measures in detail.

Socio-emotional competence was measured using the Social and Emotional Competence Survey (SECS) – Workplace version. Though the SECS includes both importance and demonstration ratings, this investigation focussed only on the demonstration ratings. Each item on the SECS was rated on a 5-point Likert scale, where 1 represented "significantly less than," 2 indicated "less than," 3 was "average/typical," 4 stood for "more than," and 5 denoted "significantly more than." Thus, higher scores indicated greater socio-

emotional functioning. In this sample, the internal consistency reliabilities were the following: self-aware α = .82, awareness of others α = .88, authenticity α = .80; emotional reasoning α = .84; self-management α = .80, and positive influence α = .89. The total scale reliability was α = .95.

Mindfulness, defined as the quality of being fully present and engaged in the moment, aware of one's thoughts, feelings, and surroundings without judgment, was measured using the Five-Facet Mindfulness Questionnaire (FFMQ; Baer et al., 2006). The FFMQ encompasses five sub-dimensions of mindfulness; however, in this study, only the Act with Awareness subscale was administered. Act with Awareness represents the degree to which individuals are able to focus on their current activities with full attention, rather than operating on "autopilot" or being easily distracted. It emphasizes the importance of intentionality in actions and the ability to maintain focus on the task at hand. Example items from the Act with Awareness subscale include statements such as “When I do things, my mind wanders off and I’m easily distracted” and “I am easily distracted.” Respondents rated each item on a 5-point Likert scale, where 1 indicated "Never or rarely true" and 5 indicated "Very often or always true." The averaged composite scores were subtracted from a value of 6 to ensure that higher scores indicated greater mindfulness (this sample α = .93).

Psychological Resilience, defined as the ability to adapt to adversity, bounce back from challenges, and maintain mental well-being in the face of stress, was measured using the Connor-Davidson Resilience Scale (Short-Form; Connor & Davidson, 2003). This scale represents a single dimension of resilience, capturing the overall capacity to withstand and recover from difficulties. Example items from the scale include statements such as “Able to adapt to change” and “Tend to bounce back after illness or hardship.” Participants rated each item on a 5-point Likert scale, where 1 indicated "Not true at all" and 5 indicated "True nearly all of the time." This scale provides a concise yet comprehensive measure of an individual's resilience (this sample α = .90).

Occupational Stress, defined as the physical and emotional strain that arises from job-related demands and pressures, was measured using the Occupational Stress Inventory (Osipow & Spokane, 1998). While the full inventory assesses 14 sub-dimensions of occupational stress, this investigation focused on three specific subdimensions: Role Overload, Psychological Strain, and Self-Care. Role Overload refers to the stress experienced when job demands exceed the individual's capacity to meet them, often leading to feelings

of being overwhelmed. Psychological Strain captures the emotional and mental stress that arises from work-related pressures, reflecting the toll these demands take on an individual's psychological well-being. Self-Care pertains to the practices and behaviours individuals engage in to manage stress and maintain personal well-being amidst workplace demands. Participants rated each item on a 5-point Likert scale, where 1 indicated "Rarely or never true" and 5 indicated "True most of the time". In this sample, the internal consistency reliabilities were the following: role overload, α = .86; psychological strain, α = .91; and self-care α = .81.

No outliers were identified based on the inter-quartile range rule with a 3.0 multiplier. To evaluate the convergent validity of the SECS we first ran a series of Pearson correlations between the SECS, mindfulness, resilience, and occupational stress scores. As can be seen in Table 7.3, the SECS total scores correlated positively with self-care (r = .30, p < .001) and negatively with psychological strain (r = -.27, p < .001), as hypothesized. Thus, individuals with higher socio-emotional competence tend to engage more in effective self-care practices and experience lower levels of psychological strain, providing supportive evidence for the convergent validity of the SECS. Furthermore, the SECS total scores failed to correlate significantly with the role overload scores (r = .02, p = .511), supporting the expectation of divergent validity. Thus, the SECS appears to specifically assess socio-emotional competencies without being confounded by external job demands, reinforcing its discriminant validity.

We note that the self-management subscale of the SECS tended to yield the largest correlations with occupational stress (see Table 7.3), which may be considered a theoretically congruent finding, given that self-management involves the ability to regulate one's emotions, behaviours, and time effectively. This skill is crucial for managing the demands and pressures of the workplace, thereby directly impacting levels of occupational stress. Individuals who excel in self-management are likely better equipped to handle stressors, maintain emotional stability, and engage in proactive self-care, which aligns with the observed correlations.

The SECS also correlated positively with mindfulness (r = .32, p < .001) and resilience (r = .60, p < .001). Thus, these findings further support the convergent validity of the SECS, as higher socio-emotional competence is logically associated with greater mindfulness and resilience. Specifically, mindfulness, characterized by focused awareness and emotional

regulation, naturally complements the socio-emotional skills measured by the SECS. Similarly, resilience, reflecting the capacity to adapt and recover from stress, aligns with the emotional and interpersonal strengths captured by the SECS. These positive correlations underscore the SECS's effectiveness in assessing related constructs that are central to emotional intelligence and overall emotional well-being.

We observed that mindfulness and resilience also showed statistically significant correlations with occupational stress—negatively with psychological strain and positively with self-care (see Table 7.3). To explore these associations further, we extended our analyses to test the hypothesis that the influence of the SECS on occupational stress may be partially mediated by these two dimensions. Specifically, we propose that socio-emotional competence may enhance mindfulness and resilience, which in turn could reduce occupational stress.

To test these hypotheses, we employed a path analytic model (maximum likelihood estimation) in which SECS total scores were specified as predictors of both mindfulness and resilience. In turn, mindfulness and resilience were modeled as predictors of occupational stress. Additionally, SECS total scores were directly linked to occupational stress to assess both direct and indirect effects. We tested two separate models, with psychological strain and self-care each specified as the dependent variable in different analyses. In order to test the direct and indirect effects for statistical significance, we used bootstrapping (5000 resamples; bias-corrected confidence intervals)

As shown in Figure 7.4 (right side), SECS total scores had both a direct effect on psychological strain, β = .06, 95% CI [.01, .11], p = .035, and two significant indirect effects. The first indirect effect operated through mindfulness, β = -.09, 95% CI [-.11, -.07], p < .001, and the second through resilience β = -.25, 95% CI [-.28, -.21], p < .001. Together, the model accounted for 28.7% of the variance in psychological strain (R^2 = .287, 95%CI: [.24, .33], p < .001). Given that the model was fully parameterized (with no degrees of freedom), the model fit was perfect.

Table 7.3

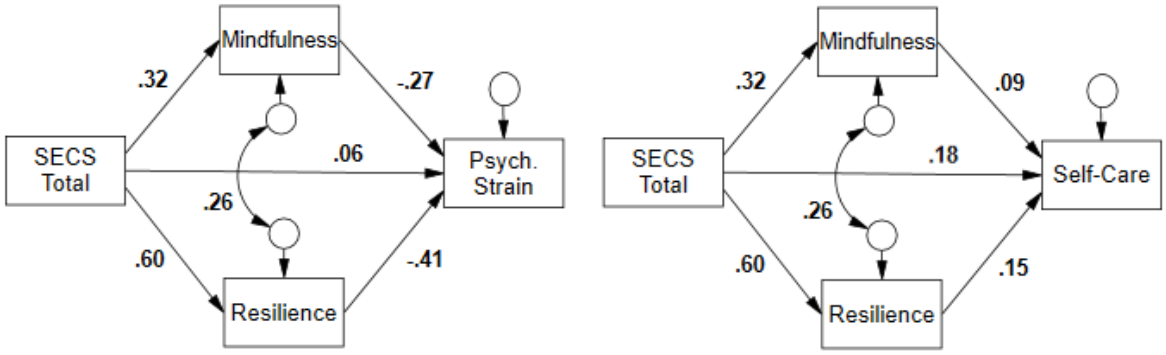
Pearson Correlations and Descriptive Statistics for SECS, Mindfulness, Resilience, and Occupational Stress Variables

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	*M*	*SD*	Skew
1. SECS Total	1.0											3.70	.48	-.02
2. SECS-SA	.76	1.0										3.57	.59	-.20
3. SECS-AO	.81	.55	1.0									3.81	.60	-.31
4. SECS-Auth	.85	.62	.61	1.0								3.55	.60	-.20
5. SECS-ER	.83	.53	.65	.66	1.0							3.80	.55	-.08
6. SECS-SM	.78	.49	.49	.60	.55	1.0						3.65	.60	-.26
7. SECS-PI	.84	.50	.65	.65	.66	.66	1.0					3.80	.59	-.07
8. Mindfulness	.32	.18	.14	.31	.23	.43	.26	1.0				3.62	.78	-.44
9. Resilience	.60	.43	.34	.50	.43	.70	.50	.39	1.0			3.83	.63	-.41
10. Role Overload	.02	-.01	.05	.01	.07	-.09	.05	-.13	-.10	1.0		2.89	.83	.14
11. Psychological Strain	-.27	-.21	-.09	-.26	-.13	-.40	-.20	-.41	-.48	.43	1.0	2.37	.87	.62
12. Self-Care	.30	.26	.18	.29	.21	.30	.21	.21	.29	-.15	-.30	2.79	.76	.44

Note. *N* = 1742; SECS = Social and Emotional Competence Survey; Self-Awareness; AO = Awareness of Others; AU = Authenticity; ER = Emotional Reasoning; SM = Self-Management; PI = Positive Influence; EIg = general emotional intelligence; all correlations greater than |.047| were statistically significant, $p < .05$.

Figure 7.4

Path Analyses Depicting Serial Mediation Models Predicting Psychological Strain (Left-Side) and Self-Care (Right-Side)



Note. *N* = 1742; all coefficients are fully standardized and statistically significant, $p < .05$.

These findings suggest that higher socio-emotional competence, as measured by the SECS, is associated with lower psychological strain, both directly and indirectly. The negative indirect effects through mindfulness and resilience indicate that individuals with greater socio-emotional competence are more mindful and resilient, which in turn reduces their experience of psychological strain. The positive direct effect of SECS on psychological strain, though small, may reflect the complex interplay between socio-emotional competence and stress, where certain aspects of socio-emotional functioning could increase awareness of stressors. Overall, the significant indirect effects highlight the importance of mindfulness and resilience as mechanisms through which the SECS exerts its influence on reducing occupational stress, supporting the validity of the SECS in capturing meaningful aspects of emotional and social competence.

In a corresponding manner, as shown in Figure 7.4 (left side), SECS total scores had both a direct effect on self-care, β = .18, 95% CI [.13, .24], $p < .001$, and two significant indirect effects. The first indirect effect operated through mindfulness, β = .03, 95% CI [.01, .05], $p < .001$, and the second through resilience β = .08, 95% CI [.05, .12], $p < .001$. Together, the model accounted for 11.7% of the variance in self-care (R^2 = .117, 95% CI: [.09, .15], $p < .001$). Given that the model was fully parameterized (with no degrees of freedom), the model fit was perfect.

These results demonstrate that higher socio-emotional competence, as measured by the SECS, is positively associated with better self-care practices, both directly and indirectly. The positive direct effect suggests that individuals with greater socio-emotional competence are more likely to engage in behaviours that support their well-being and manage stress effectively. The significant positive indirect effects through mindfulness and resilience further reinforce this finding. Specifically, individuals who are more mindful and resilient—qualities potentially enhanced by socio-emotional competence—are also more likely to prioritize and practice self-care. These findings highlight the role of socio-emotional competence, as measured by the SECS, in promoting behaviours that enhance overall well-being, supporting the SECS's validity in predicting personal care and stress management outcomes.

In summary, this study aimed to evaluate the validity of the Social and Emotional Competence Survey (SECS) by examining its relationships with mindfulness, resilience, and occupational stress among a sample of 1,742 employees. As hypothesized, SECS scores correlated positively with mindfulness and resilience, and negatively with psychological strain, supporting the convergent validity of the SECS. The results also showed that SECS scores were positively associated with self-care practices, further demonstrating the survey's relevance in predicting outcomes related to personal well-being and stress management. Notably, the lack of correlation with role overload provides evidence for the SECS's divergent validity, indicating that it specifically measures socio-emotional competencies rather than general job-related stress. Overall, these findings support the SECS as a valid tool for assessing key aspects of socio-emotional functioning in the workplace.

Study 3: SECS and Leadership in School Principals

In an investigation by Palmer (2024), the validity of the Social and Emotional Competence Survey (SECS) was further evaluated by examining its predictive relationships with interaction quality at work and job performance ratings. Additionally, the study explored how the SECS compared to the Victorian Aspiring Principal Assessment (VAPA) in predicting these outcomes. The VAPA is a psychometric measure designed to evaluate the key competencies required for effective school leadership, aligned with the Australian

Professional Standard for Principals. The VAPA framework encompasses five Professional Practice Areas: Leading Teaching and Learning, Developing Self and Others, Leading Improvement, Innovation and Change, Leading the Management of the School, and Engaging and Working with the Community. Each area is assessed through a series of 47 Performance Indicators that reflect the essential skills, knowledge, and behaviours expected of first-time principals. The SECS, designed to measure socio-emotional competencies critical for workplace success, was hypothesized to correlate positively with VAPA scores. Moreover, it was anticipated that the SECS would predict interaction quality and job performance uniquely, beyond what could be explained by the VAPA.

The study involved a sample of 485 Victorian (Australia) principals who completed the SECS, the VAPA, a single-item to measure quality of interactions, and an item to measure job performance. Importantly, the analyses were based on rater evaluations rather than self-reports. This is an important consideration, as rater-based assessments are generally less susceptible to biases such as social desirability and self-enhancement, providing a more objective evaluation of socio-emotional competence, leadership abilities, and job performance. Consequently, the findings offer a robust validation of the SECS in real-world educational settings, where accurate assessments of these competencies are critical for effective leadership.

Based on the statistical analyses, both the SECS and VAPA subdimensions were found to correlate substantially with interaction effectiveness and job performance ratings. Importantly, the SECS demonstrated strong predictive power, particularly in its ability to predict social interaction effectiveness at work. Specifically, the SECS explained 71% of the variance in social interaction effectiveness, with Awareness of Others and Positive Influence emerging as the most significant predictors. In comparison, the VAPA, while also predictive, explained a smaller portion of this variance.

Further analysis using a path analytic model revealed that the SECS had both direct and indirect effects on job performance. The SECS not only directly predicted job performance but also exerted a substantial indirect effect via social interaction effectiveness, which was a significant mediator. The VAPA, although a unique predictor of job performance, showed smaller total (in combination) direct and indirect effects compared to the SECS. The model accounted for 75.3% of the variance in job performance, underscoring the robust predictive validity of the SECS (and the VAPA) in this context.

Overall, the findings from Palmer's (2024) study provide strong evidence for the validity of the SECS, highlighting its effectiveness in predicting critical workplace outcomes such as interaction quality and job performance. Furthermore, the SECS demonstration incremental predictive validity beyond traditional leadership assessments like the VAPA.

Job Performance and Workplace Interaction Quality

While Palmer's (2024) study indicated that the SECS is positively associated with interaction quality and job performance, the research was limited to a specific job role—school principals—and a relatively modest sample size of 485 participants. To further explore these associations, we expanded the investigation using a larger and more diverse dataset, comprising 41,862 observer ratings of 10,200 individuals from the SECS normative sample. This broader analysis allowed for a more comprehensive examination of the relationships between the SECS, workplace interaction quality, and job performance across a wider range of roles and contexts.

In practical terms, in addition to the SECS ratings, the raters supplied a response to the question 'How well does this person perform their job?'. Ratings for this question were based on a five-point Likert scale: 1= Very poorly; 2= Below average; 3 = Average; 4 = Above average; 5 = Very well. Support for the validity of the SECS would be present if the correlations are positive and statistically significant. The analyses were restricted to raters with a sample of 41,682 ratings (of 10,200 individuals).

Based on a series of bivariate regressions, it was found that all six SECS subdimensions, and the Total SECS composite scores, predicted job performance positively and significantly: SA: $\beta = .54$, 95% CI [.53, .54], $p < .001$, AO: $\beta = .53$, 95% CI [.53, .53], $p < .001$; AU: $\beta = .56$, 95% CI [.55, .56], $p < .001$; ER: $\beta = .54$, 95% CI [.53, .54], $p < .001$; SM: $\beta = .59$, 95% CI [.58, .59], $p < .001$; PI: $\beta = .56$, 95% CI [.55, .56], $p < .001$; and Total SECS: $\beta = .61$, 95% CI [.60, .61], $p < .001$.

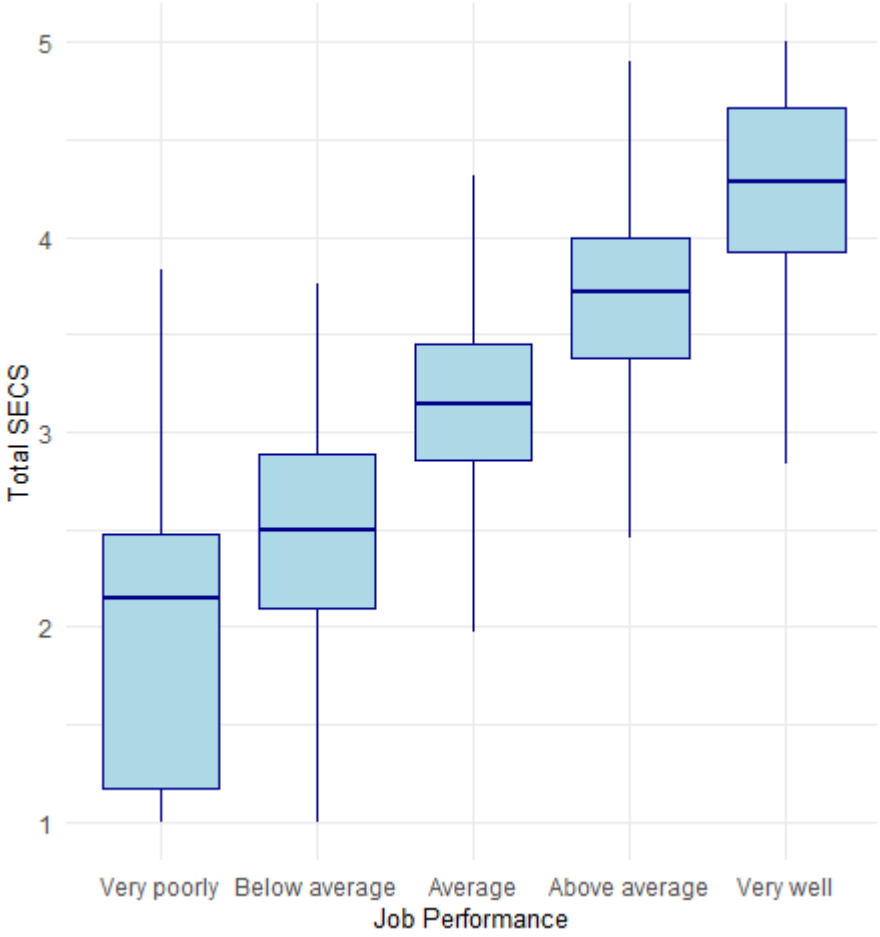
Thus, higher levels of socio-emotional competence, as perceived by the raters, were associated with better job performance among the participants. Based on a bivariate regression, the unstandardized beta-weight was estimated at $b = .61$, $p < .001$. Therefore, a one unit increase in total SECS scores corresponded to a .61 unit increase in observer rated job performance. As an example, moving from a total SECS score of 3.0 to 4.0 would, on average, correspond to a .61-point increase in observer-rated job performance ratings on

the 5-point scale, illustrating the significant impact that higher socio-emotional competence has on perceived job performance (assuming a causal connection).

To better visualize the magnitude of the effect, we created box plots instead of a scatter plot, as the dependent variable data were consistent with an ordinal scale, rather than an interval scale (see Figure 7.5). As the effects were similar across all dimensions, we restricted this portion of the analysis to the total SECS scores. As can be seen in Figure 7.5, the plot shows that individuals with 'Very poorly' job performance ratings (*n* = 25) have a median total SECS rating of 2.14 (*SD* = 0.98), while those rated 'Very well' for job performance (*n* = 23,589) have a median total SECS rating of approximately 4.29 (*SD* = 0.50).

Figure 7.5

Box Plot Depicting the Association Between Total SECS Scores and Job Performance



Note. *N* = 41,682 observer-ratings.

Next, we tested the hypothesis that socio-emotional functioning associates positively with quality of interpersonal interactions at work. In addition to the SECS ratings, the raters supplied a response to the question 'Compared with others you know, how well does this person interact with others at work?'. Ratings for this question were based on the same five-point Likert scale: 1= Very poorly; 2= Below average; 3 = Average; 4 = Above average; 5 = Very well. Support for the validity of the SECS would be present if the correlations are positive and statistically significant. The analyses were also restricted to raters with a sample of 41,682 ratings (of 10,200 individuals).

Based on a series of bivariate regressions, and the Total SECS composite scores, it was found that all six SECS dimensions predicted interaction quality positively and significantly: SA: β = .62, 95% CI [.61, .62], $p < .001$, AO: β = .63, 95% CI [.63, .63], $p < .001$; AU: β = .59, 95% CI [.58, .59], $p < .001$; ER: β = .58, 95% CI [.57, .58], $p < .001$; SM: β = .59, 95% CI [.59, .60], $p < .001$; PI: β = .63, 95% CI [.63, .63], $p < .001$; and Total SECS: β = .67, 95% CI [.66, .67], $p < .001$.

Thus, higher levels of socio-emotional competence, as perceived by the raters, were associated with better interpersonal interaction quality among the participants. Based on a bivariate regression, the unstandardized beta-weight was estimated at b = .83, p < .001. Therefore, a one unit increase in total SECS scores corresponded to a .83 unit increase in observer rated interpersonal interaction quality. As an example, moving from a total SECS score of 3.0 to 4.0 would, on average, correspond to a .83-point increase in interpersonal interaction quality ratings on the 5-point scale, illustrating the significant impact that higher socio-emotional competence has on perceived interpersonal interaction quality (assuming a causal connection).

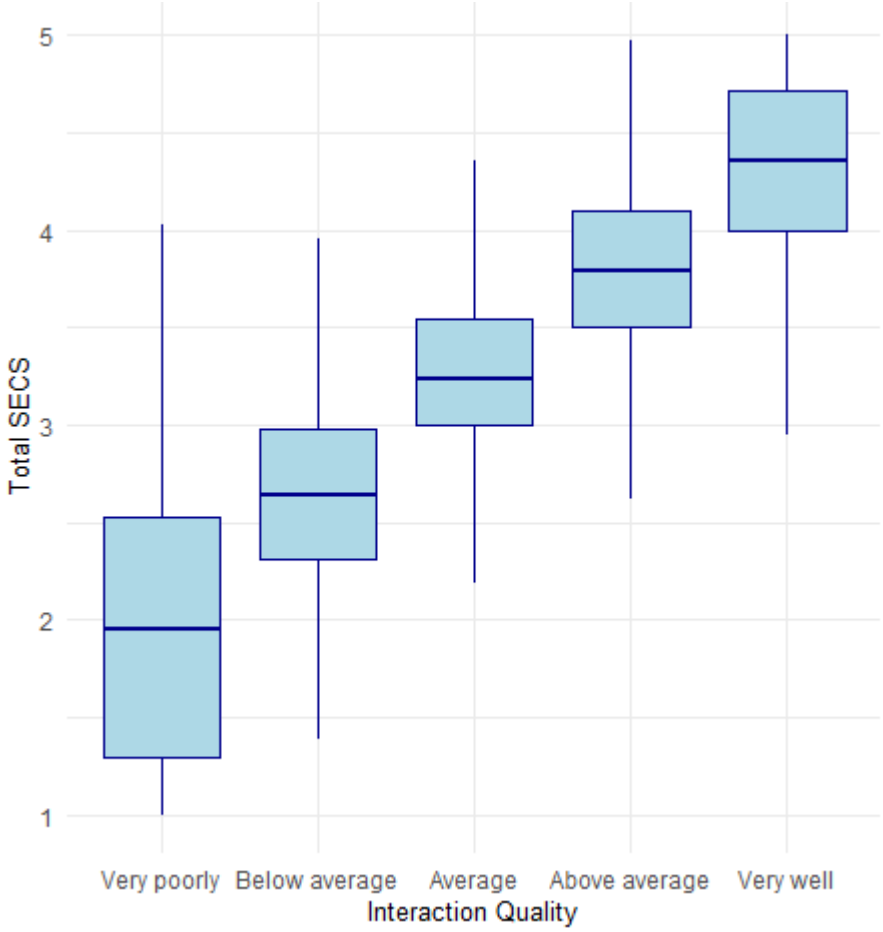
To appreciate the magnitude of the effect, the total SECS medians that corresponded to each level of the interpersonal interaction quality were specified in a box plot. As can be seen in Figure 7.6, there was a substantial, positive (increasing) trend in the SECS medians, running from 'Very poorly' to 'Very well' interpersonal interaction quality.

In summary, the consistent and robust findings from our expanded analysis provide strong evidence supporting the validity of the SECS. The significant positive associations between SECS scores and both job performance and workplace interaction quality across a large and diverse sample indicate that the SECS effectively measures socio-emotional competence, which is meaningfully related to key indicators of workplace

success. These results help affirm the SECS as a valid tool for assessing socio-emotional competencies in a variety of professional contexts.

Figure 7.6

Box Plot Depicting the Association Between Total SECS Scores and Interaction Quality



Note. *N* = 41,682 observer-ratings; Total EI (y-axis) = Total SECS scores.

As a follow-up to Palmer's (2024) study, a larger and more diverse sample was used to further evaluate the validity of the SECS. The analysis involved 41,682 observer ratings of 10,200 individuals, examining the relationship between SECS scores and both job performance and interaction quality at work. The results demonstrated that all six SECS subdimensions, as well as the total SECS composite score, significantly predicted both job performance and interaction quality, with stronger SECS ratings associated with higher performance and better interactions. These findings, supported by visualizations such as box plots, reinforce the SECS's validity as a reliable measure of socio-emotional competence in the workplace, applicable across a wide range of roles and contexts.

SECS and Age

Next, we examined the associations between EI and age, hypothesizing a positive association. Theoretically, socio-emotional functioning should increase with age, as individuals gain more life experience, develop better emotional regulation skills, and improve their understanding of social dynamics (Mayer et al., 1999). Over time, people tend to become more adept at managing their emotions, empathizing with others, and navigating complex interpersonal relationships, all of which are key components of emotional intelligence.

A substantial amount of research has largely failed to identify an arguably meaningful positive association between age and EI. That is, the reported associations that are found to be statistically significant tend to be rather small ($r < .15$). However, essentially all of this research is based on self-reported ratings of EI. Consequently, we investigated the association between age and EI via SECS scores for both self-ratings and other-ratings.

Our results largely confirmed the previous self-report literature, as age correlated significantly and positively with EI, however, the effects were small, based on our analysis of 10,200 self-reported SECS ratings: SA: $r = .08$, 95% CI [.06, .08], $p < .001$, AO: $r = .09$, 95% CI [.07, .09], $p < .001$; AU: $r = .14$, 95% CI [.12, .14], $p < .001$; ER: $r = .12$, 95% CI [.10, .12], $p < .001$; SM: $r = .02$, 95% CI [-.001, .02], $p = .068$; PI: $r = .10$, 95% CI [.08, .10], $p < .001$; Total SECS: $r = .10$, 95% CI [.08, .10], $p < .001$.

Correspondingly, SECS ratings provided by others also correlated positively and statistically significantly, though again, weakly with age: SA: $r = .04$, 95% CI [.02, .04], $p < .001$, AO: $r = .04$, 95% CI [.02, .04], $p < .001$; AU: $r = .12$, 95% CI [.10, .12], $p < .001$; ER: $r = .10$, 95% CI [.08, .10], $p < .001$; SM: $r = .01$, 95% CI [-.01, .01], $p = .433$; PI: $r = .10$, 95% CI [.08, .10], $p < .001$; Total SECS: $r = .08$, 95% CI [.06, .08], $p < .001$.

Importantly, an examination of the scatter plots with LOESS regression lines revealed a non-trivial amount of nonlinearity in the association between the SECS and age. Specifically, as can be seen in Figure 7.7, it is clear that the SECS ratings increase most substantially between the ages of approximately 55 to 80.[3] It is also notable that the

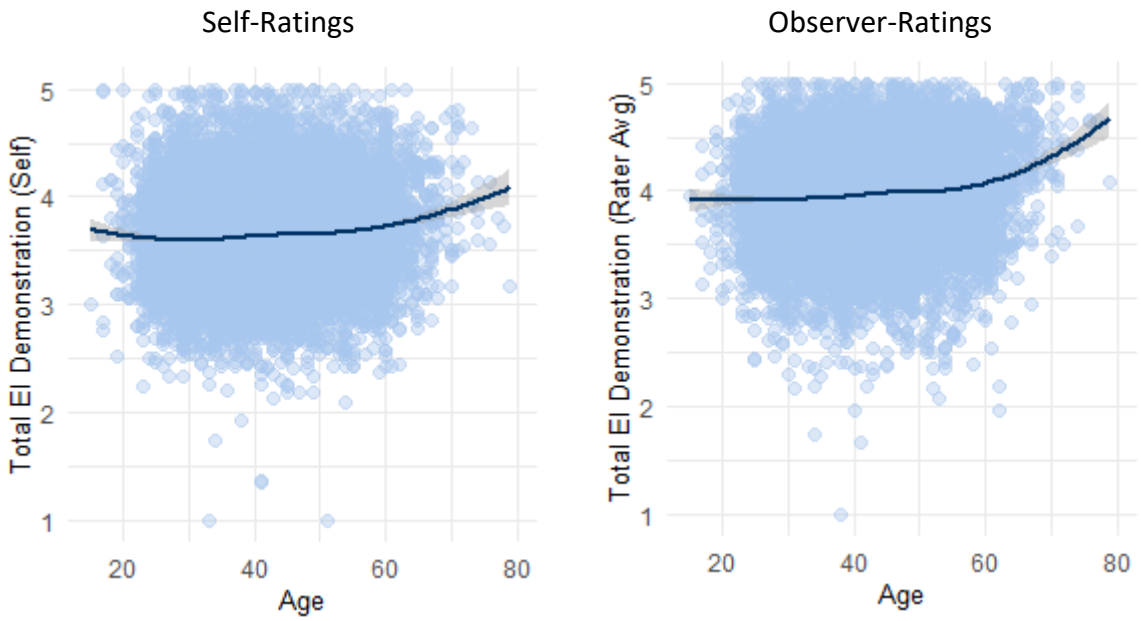
[3] We excluded participants over the age of 80 for the scatter plots, as there were relatively few such cases in the sample.

nonlinear effect appears to be more pronounced for rater ratings (which may be considered to be more valid sources), in comparison to self-reported SECS ratings.

In summary, while the positive associations between age and socio-emotional functioning, as measured by the SECS, were generally small, our findings revealed a noteworthy nonlinear trend, particularly in rater-based assessments. Socio-emotional functioning appeared to increase more substantially in later adulthood, especially between the ages of 55 and 80. This suggests that while the overall relationship between age and socio-emotional functioning may be modest, there may be important age-related gains in socio-emotional competence that are more evident in older adults, particularly when assessed by others.

Figure 7.7

Scatter Plots Depicting the Associations between Total SECS Scores and Age: Self-Ratings (Left-Side) and Rater-Ratings (Right-Side)



Note. *N* = 10,200 (*N* = 41,682 observer-ratings have been averaged for the 10,200 participants); Total EI (y-axis) = Total SECS scores.

Chapter 8: Cultural Considerations

While the construct of Emotional Intelligence (EI) has been extensively researched, its measurement across diverse cultural contexts requires careful consideration. Research generally suggests that many EI measures, particularly those developed in Western contexts, are largely portable across different cultures. For instance, studies using tools like the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) and the Genos Emotional Intelligence Inventory (Genos EI) have shown that these measures maintain their validity across various cultural groups, including comparisons between Western and non-Western populations.

For example, Gignac and Ekermans (2010) found only minor differences in EI scores between Black and White South African groups using the Genos EI, indicating that the measure functions similarly across these groups. Similarly, research on the MSCEIT demonstrated its factorial invariance in both individualist (e.g., French) and collectivist (e.g., Pakistani) cultures, suggesting that the test measures the same underlying constructs across these cultural settings (Karim & Weisz, 2010).

However, while these findings are promising, they also underscore the importance of exercising caution. Despite the general trend of cross-cultural applicability, there are always potential risks of cultural bias in any psychometric tool, and subtle differences in how emotional intelligence is expressed or understood across cultures can lead to variations in test performance. Therefore, until specific statistical evidence is gathered to confirm the validity and reliability of an EI measure across a wide array of non-Western cultures, users should remain vigilant and exercise caution. The acknowledged limitation of psychometric evaluations of the SECS in non-Western cultures is something we hope to address in future studies.

Chapter 9: SECS Leadership Version

As described in a previous chapter, there are two version of the SECS: a workplace form and a leadership form. Both versions contain the same number of items (42) and share five of the six subscales. The difference lies in the sixth subscale: in the workplace version, it is called Positive Influence, while in the leadership version, it is named Inspiring Others.

The Inspiring Performance subscale was designed to capture behaviours that are critical for effective leadership, such as providing constructive feedback, facilitating professional development, recognizing achievements, and helping team members understand their purpose within the organization. These activities are key responsibilities in leadership roles. For the purposes of comparison, the subscale items are listed in Table 9.1

Table 9.1

Items Associated with the Sixth SECS Subscale: Workplace versus Leadership

Workplace – Positive Influence	Leadership – Inspiring Performance
1. Provides useful support to others.	1. Provides useful support and guidance.
2. Helps others resolve workplace conflicts.	2. Provides constructive feedback on behaviour and performance.
3. Helps others respond effectively to stressful situations.	3. Helps you understand your purpose and contribution to the organisation.
4. Responds effectively to others' inappropriate behaviour.	4. Notices inappropriate behaviour in others and responds effectively.
5. Helps create a positive work environment.	5. Maintains a positive work environment.
6. Responds effectively to others' feelings.	6. Helps facilitate your development and advance your career.
7. Positively influences the way others feel.	7. Recognises others' hard work and achievements.

With respect to similarities across the two subscales (Positive Influence and Inspiring Performance), both subscales emphasize supportive behaviours that contribute to a positive and productive work environment. Items in both subscales focus on offering guidance, responding effectively to others' behaviours, and maintaining a constructive atmosphere.

For example, both scales include items related to providing support, resolving conflicts or inappropriate behaviours, and fostering a positive work environment.

With respect to differences, the Positive Influence subscale primarily centers on interpersonal support and conflict resolution, emphasizing how individuals help others manage stress, resolve conflicts, and respond to feelings and behaviours in the workplace. In contrast, the Inspiring Performance subscale focuses more on leadership behaviours that inspire and facilitate the professional growth and performance of others. This includes providing constructive feedback, helping individuals understand their roles within the organization, recognizing achievements, and guiding career development.

Since the workplace and leadership forms of the SECS share identical items across five subscales and exhibit significant commonalities in the sixth, we believe it is reasonable to infer that the reliability and validity evidence for the workplace version also applies to the leadership version. Therefore, we do not present extensive additional psychometric evidence for the SECS leadership version in this manual. However, we provide an overview of the leadership normative sample along with descriptive statistics. Additionally, we report the internal consistency reliabilities for the six subscales within the leadership version.

Normative Sample

The normative sample upon which scores from an inventory are interpreted should be both large and representative of the population of interest. In the context of the SECS Leadership version, the population of interest is an adult, English speaking, with at least a high school education working in leadership roles. As per the SECS workplace version, the SECS leadership version consists of 84 items: 42-item of the items measure the importance and 42-items measure the demonstration of EI related phenomena. The inventory was administered across a number of research, workshop, and professional situations (e.g., HR, executive coaching, etc.) over several years (2014 to 2024), which resulted in a useable sample of 15,068 individual self-reports (as per the SECS(W), we randomly sampled from the larger number of female participants to ensure an equal number of males and females).

In this section of the manual, the nature of the normative sample (N = 15,068) will be described by providing descriptive statistics relevant to age, gender, role-level, and country of residence.

Age

The normative sample consists exclusively of adults, ranging in age from 18 to 100, with a mean of 42.82 (*SD* = 9.20). The absolute skew and kurtosis levels associated with age distributions were equal to .24 and -.10, respectively, which is suggestive of an approximately normal distribution. As can be seen in Table 9.2, the normative sample consisted of adult individuals across the adult age spectrum of individuals likely to be found in the workplace.

Table 9.2

Frequency Distribution of Age Groups that comprise the SECS Normative Sample (Leadership)

Age	Frequency	Percentage
18-23	86	0.57
24-28	673	4.47
29-33	1756	11.66
34-38	2711	17.99
39-43	2957	19.62
44-48	2680	17.79
49-53	2137	14.18
54-58	1367	9.07
59-63	561	3.72
64+	140	0.93
Total	15068	100

Gender

To ensure an appropriate gender balance in the leadership normative sample, we randomly selected from the female responses, consistent with the workplace normative sample. Consequently, the gender breakdown of the leadership normative sample included essentially the same number of females (49.97%; *n* = 7,529) and males (49.97%; *n* = 7,476), which is largely consistent with the known populations of many industrialized countries. A small percentage of people selected 'I would prefer not to say' (0.37%; *n* = 55) and 'Other' (0.05%; *n* = 8).

Role-Level

The self-nominated position-levels (role-level) within the SECS leadership normative sample was mostly consistent with middle managers (32.36%) and senior managers (22.25), however, there was also a reasonable number of respondents at the C-level executive level (5.12%; see Table 9.3).

Table 9.3

Position-level Breakdown Associated with the SECS Normative Sample

Position	Frequency	Percentage
C-Level Executive	772	5.12
Director/Board Member	568	3.77
Divisional Leader	1137	7.55
Frontline Leader	1939	12.87
I would prefer not to say	374	2.48
Individual Contributor	1127	7.48
Middle Manager	4876	32.36
Project Manager	922	6.12
Senior Manager	3353	22.25
Total	15068	100.00

Country of Residence

The SECS leadership normative sample is heterogeneous with respect to the country of residence of the respondents. As can be seen in Table 9.4, the normative sample is primarily based upon a total of eight industrialized countries. Australia is the single largest contributor to the normative sample (57.36%), which reflects the fact that the SECS-L was originally developed by Genos International which is based in Australia. However, as many 1483 Americans, 1213 New Zealanders, and 409 British are also included in the SECS-L normative sample (see Chapter 8 for cultural considerations in the application of the SECS).

Table 9.4

Country of Residence of the SECS Leadership Normative Sample

Residence	Frequency	Percentage
Australia	8643	57.36
United States of America	1483	9.84
New Zealand	1213	8.05
United Kingdom	409	2.71
Kenya	279	1.85
Latvia	268	1.78
Ireland	239	1.59
Singapore	208	1.38
United Arab Emirates	142	0.94
South Africa	114	0.76
China	108	0.72
Hungary	108	0.72
Other	1854	12.30
Total	15068	100

SECS(L): Descriptive Statistics and Analyses

The means, standard deviations, skew and kurtosis associated with the distribution of the SECS-L scores can be found in Table 9.5. The rater Total SECS-L demonstration mean of 3.66 was associated with a standard deviation of .46. Thus, the coefficient of variation associated with the SECS-L total scores was equal to .13 (.46 / 3.66), which corresponds closely to the coefficient of variation associated with the Bar-On EQ-*i* normative sample (i.e., .11). Thus, the amount of spread associated with the SECS-L normative sample may be considered acceptable. The standard deviation of .46 also implies that approximately 95% of the normative sample scored between 2.76 and 4.56.

Table 9.5

Descriptive Statistics for the SECS-L: Subscales and Total SECS Scores

	Self-Ratings						Rater-Ratings					
	Importance			Demonstration			Importance			Demonstration		
	M	*SD*	Skew	*M*	*SD*	Skew	*M*	*SD*	Skew	*M*	*SD*	Skew
SA	4.49	.42	-.74	3.68	.50	.17	4.33	.51	-.78	3.98	.68	-.57
AO	4.29	.47	-.38	3.57	.53	.15	4.24	.55	-.59	3.93	.71	-.46
AU	4.37	.45	-.51	3.67	.53	.11	4.32	.53	-.67	4.05	.67	-.56
ER	4.36	.46	-.52	3.75	.53	.11	4.33	.53	-.71	4.05	.67	-.53
SM	4.50	.44	-.73	3.65	.56	.17	4.37	.53	-.69	4.12	.65	-.57
IP	4.54	.45	-.86	3.62	.61	.16	4.35	.58	-.77	4.02	.72	-.51
Total	4.42	.38	-.56	3.66	.46	.27	4.32	.48	-.66	4.03	.63	-.52

Note. Self-Rated data *N* = 15,068; Rater-data based on *N* = 95,562 ratings (averaged for each of the respective self-rated participant).

Next, were report the correlations between the six subscales based on the rater ratings. As can be seen in Table 9.6, there were large, positive correlations between all six dimensions, supporting the notion that each dimension measures, to some degree, an overall socio-emotional functioning capacity. The positive correlations also help support the interpretation of total SECS-L scores.

Table 9.6

Pearson Correlations between the SECS-L Subscales: Rater Data

	SA	AO	AU	ER	SM	IP
SA	1.0					
AO	.85	1.0				
AU	.82	.83	1.0			
ER	.79	.82	.83	1.0		
SM	.79	.77	.81	.79	1.0	
IP	.79	.81	.82	.81	.81	1.0

N = 95,562; all correlations statistically significant, $p < .001$; Self-Awareness; AO = Awareness of Others; AU = Authenticity; ER = Emotional Reasoning; SM = Self-Management; IP = Inspiring Performance.

Reliability

As can be seen in Table 9.7, the internal consistency reliabilities associated with all six subscales for the 'importance' perspective were all very good, as they ranged from .79 to .88 for the self-rated data, and .87 to .92 for the rater data. Though somewhat lower, the internal consistency reliabilities were all respectable for the demonstration data, ranging from .76 to .86 for the self-rated data and .88 to .93 for the rater data. Finally, at the total EI score level, the reliabilities were equal to .94 or greater across importance and demonstration and self/rater data. Although the subscale scores met Nunnally's guidelines for basic research, we recommend placing greater emphasis on the total SECS scores for critical decisions, as these scores exceeded the .90 threshold.

Table 9.7

Internal Consistency Reliability: Coefficient Alphas (SECS Leadership Version)

	Self-Ratings		Rater-Ratings	
	Importance	Demonstration	Importance	Demonstration
SA	.81	.78	.87	.91
AO	.83	.82	.89	.92
AU	.82	.77	.88	.89
ER	.82	.81	.88	.91
SM	.85	.79	.90	.89
PI	.89	.87	.91	.92
Total	.96	.95	.97	.98

Note. Self-Rated data *N* = 15,068; Rater-data *N* = 95,562; SA = Self-Awareness; AO = Awareness of Others; AU = Authenticity; ER = Emotional Reasoning; SM = Self-Management; PI = Positive Influence.

While confidence intervals can and probably should be reported for coefficient alpha, we note that the sample sizes were so large that all of the CIs corresponded to a very small range (< .02), therefore, we did not report them here.

Validity

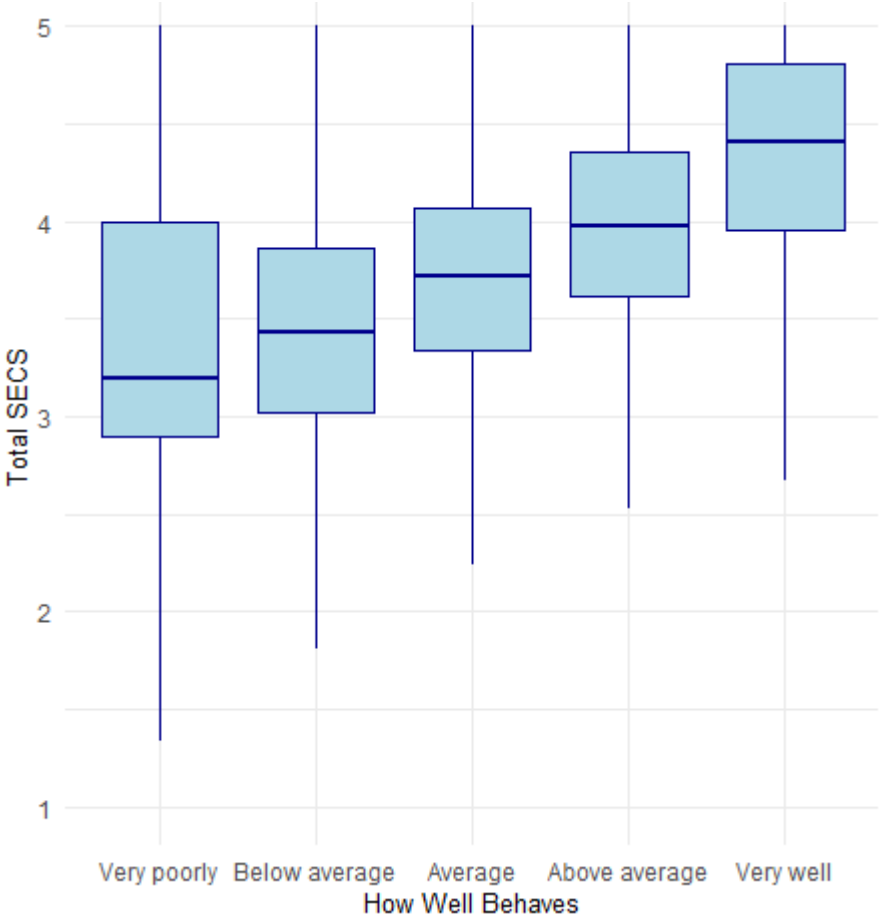
To briefly evaluate the validity of the SECS, we estimated Pearson correlations between the total SECS scores from raters and their ratings of the participants with respect to how well they behaved at work ('How well would you say you know the way this person behaves at work?'), which was responded to on a the following 5-point Likert scale: 1 = Not well at all; 2 = Not too well; 3 = Pretty well; 4 = Very well; 5 = Extremely well, and their demonstrated leadership effectiveness ('How effective would you say this person's leadership is compared with other leaders?), which was responded to on the following 5-point Likert scale: 1 = Highly ineffective; 2= Ineffective; 3 = Average; 4 = Effective; 5 = Highly effective.

The Pearson correlation between total SECS scores (raters) and how well the participants were rated to behave at work was positive and statistically significant, $r = .40$, 95% CI: [.39, .41], $p < .001$. Thus, higher levels of socio-emotional competence, as perceived by the raters, were associated with better workplace behaviour among the participants. Based on a bivariate regression, the unstandardized beta-weight was estimated at $b = .53$, $p < .001$. Therefore, a one unit increase in total SECS scores corresponded to approximately a half unit (.53) increase in observer rated quality of behaviour at work. As an example, moving from a total SECS score of 3.0 to 4.0 would, on average, correspond to a .53-point increase in rated quality behaviour ratings on the 5-point scale, illustrating the significant impact that higher socio-emotional competence has on perceived quality of behaviours at work (assuming a causal connection).

To appreciate the magnitude of the effect, the means associated with the how well behaves at work variable were included in box plot, as can be seen in Figure 9.1.

Figure 9.1

Box Plots Depicting the Association Between Total SECS Scores and How Well Leaders Behave At Work (Raters)



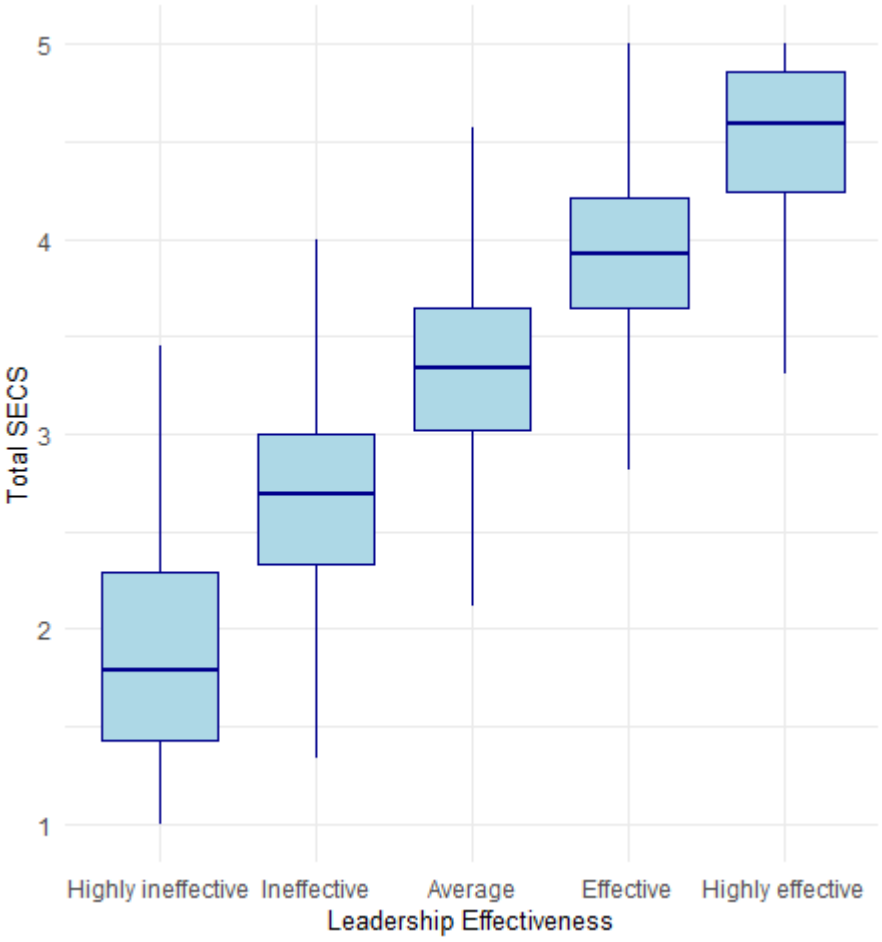
Note. Sample size, *N* = 95,562.

The Pearson correlation between total SECS scores (raters) and rated leadership effectiveness was positive and statistically significant, $r = .72$, 95% CI: [.716, .722], $p < .001$. Thus, higher levels of socio-emotional competence, as perceived by the raters, were associated with better leadership effectiveness among the participants. Based on a bivariate regression, the unstandardized beta-weight was estimated at $b = .88$, $p < .001$. Therefore, a one unit increase in total SECS scores corresponded to a .88 unit increase in observer rated leadership effectiveness. As an example, moving from a total SECS score of 3.0 to 4.0 would, on average, correspond to a .88-point increase in leadership effectiveness ratings on the 5-point scale, illustrating the very significant impact that higher socio-emotional competence has on perceived leadership effectiveness (assuming a causal connection).

To appreciate the magnitude of the effect, the total SECS medians that corresponded to each level of the leadership effectiveness variable were specified in a box plot. As can be seen in Figure 9.2, there was a substantial, positive (increasing) trend in the SECS medians, running from highly ineffective leadership to highly effective leadership.

Figure 9.2

Box Plots Depicting the Association Between Total SECS Scores and Leadership Effectiveness (Raters)



As a summary, based on the positive and statistically significant correlations between SECS scores and both workplace behaviour and leadership effectiveness, these findings provide strong support for the validity of the SECS-L. The observed relationships indicate that higher socio-emotional competence, as measured by raters who completed the SECS-L, is meaningfully associated with key indicators of professional success, thereby

supporting the SECS-L as a valid tool for assessing socio-emotional competencies in workplace settings.

Chapter 10: Concluding Comments

The SECS, building on the foundation laid by its predecessors, including the Genos EI inventory and the SUEIT, represents a significant advancement in the measurement of socio-emotional competence in workplace settings. Although the SECS is relatively new compared to other established psychological measures, the research reviewed in this technical manual strongly supports its reliability and validity in capturing key dimensions of socio-emotional functioning. The SECS has demonstrated its utility across diverse organizational contexts, providing valuable insights into emotional intelligence and its impact on workplace performance and interactions.

As with any evolving field, ongoing research is essential to further validate and refine the SECS. Future studies will undoubtedly contribute to understanding its predictive capabilities and explore its applications in even broader contexts. Genos continues to invest in research efforts to enhance the SECS and ensure it remains a cutting-edge tool for assessing socio-emotional competence. The ongoing development and research surrounding the SECS will help deepen our collective understanding of emotional intelligence and underscore its importance in fostering individual and organizational success.

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Appendix A: SECS Items (Workplace & Leadership Versions)

Subscale: Self-Awareness

1. Demonstrates awareness of the way they feel.

2. Demonstrates awareness of the impact emotions can have on their thinking.

3. Demonstrates awareness of the impact their feelings can have on how they interact with others.

4. Asks others for feedback on their behaviour.

5. Responds effectively to feedback from others.

6. Demonstrates awareness of their mood.

7. Behaves in a way that is consistent with how they describe themselves to be.

Subscale: Awareness of Others

1. Accurately acknowledges the way others feel.

2. Recognises others' non-verbal emotional cues (e.g., body language).

3. Notices when someone needs support.

4. Relates well to others' feelings.

5. Accurately views situations from others' perspective.

6. Adjusts their behaviour so that it fits well with others.

7. Accurately anticipates responses or reactions from others.

Subscale: Authenticity

1. Shares how they feel with others.

2. Describes their own feelings in a way that is sensitive to the feelings of others.

3. Expresses their feelings in the right place and time.

4. When necessary, facilitates challenging conversations effectively.

5. Is consistent in what they say and do.

6. Encourages others to express themselves.

7. Honours commitments and keeps promises.

Subscale: Emotional Reasoning

1. Reflects on feelings when decision-making.
2. Asks others how they feel about potential solutions to problems.
3. Considers issues from multiple perspectives.
4. Involves you in decisions that affect your work.
5. Demonstrates awareness of biases in decision-making.
6. Communicates decisions in a way that is sensitive to others' feelings.
7. Uses the organisation's values effectively when making important decisions.

Subscale: Self-Management

1. Responds effectively in stressful situations.
2. Demonstrates a positive, energising demeanour.
3. Adapts effectively to different/changing circumstances.
4. Responds effectively to criticism from others.
5. Manages their time effectively.
6. Controls their anger at work.
7. Improves themselves.

Subscale: Positive Influence

1. Provides useful support to others.
2. Helps others resolve workplace conflicts.
3. Helps others respond effectively to stressful situations.
4. Responds effectively to others' inappropriate behaviour.
5. Helps create a positive work environment.
6. Responds effectively to others' feelings.
7. Positively influences the way others feel.

The Leadership version of the SECS replaces the Positive Influence subscale with a subscale called Inspiring Performance. The items for Inspiring Performance are as follows:

Subscale: Inspiring Performance

1. Provides useful support and guidance.
2. Provides constructive feedback on behaviour and performance.
3. Helps you understand your purpose and contribution to the organisation.
4. Notices inappropriate behaviour in others and responds effectively.
5. Maintains a positive work environment.
6. Helps facilitate your development and advance your career.
7. Recognises others' hard work and achievements.

Appendix B: Supplementary Results

Table S.1

Pearson Correlations between SECS (Workplace) Items (Self-Ratings)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
1.SA1																																										
2.SA2	.22																																									
3.SA3	.24	.27																																								
4.SA4	.21	.24	.26																																							
5.SA5	.26	.29	.31	.27																																						
6.SA6	.21	.24	.25	.22	.27																																				
7.SA7	.24	.27	.29	.25	.31	.25																																			
8.AO1	.28	.32	.34	.3	.36	.29	.34																																		
9.AO2	.26	.29	.31	.28	.34	.27	.31	.37																																	
10.AO3	.27	.31	.33	.29	.35	.29	.33	.39	.36																																
11.AO4	.26	.3	.32	.28	.34	.28	.32	.37	.35	.37																															
12.AO5	.25	.29	.31	.27	.33	.27	.3	.36	.33	.35	.34																														
13.AO6	.23	.26	.28	.25	.3	.24	.28	.33	.3	.32	.31	.3																													
14.AO7	.24	.28	.3	.26	.31	.26	.29	.35	.32	.34	.33	.31	.28																												
15.AU1	.18	.2	.22	.19	.23	.19	.22	.25	.24	.25	.24	.23	.21	.22																											
16.AU2	.23	.26	.28	.25	.3	.25	.28	.33	.31	.32	.31	.3	.27	.29	.21																										
17.AU3	.27	.3	.33	.29	.35	.28	.32	.38	.35	.37	.36	.35	.31	.33	.24	.32																									
18.AU4	.25	.29	.31	.27	.33	.27	.3	.36	.33	.35	.34	.32	.29	.31	.23	.3	.34																								
19.AU5	.23	.26	.28	.25	.3	.25	.28	.33	.31	.32	.31	.3	.27	.29	.21	.28	.32	.3																							
20.AU6	.26	.29	.31	.28	.33	.27	.31	.37	.34	.36	.34	.33	.3	.32	.23	.31	.35	.33	.3																						
21.AU7	.2	.22	.24	.21	.26	.21	.24	.28	.26	.28	.27	.26	.23	.25	.18	.24	.27	.25	.24	.26																					
22.ER1	.22	.25	.27	.24	.29	.23	.27	.31	.29	.31	.3	.28	.26	.27	.2	.26	.3	.28	.26	.29	.22																				
23.ER2	.25	.28	.3	.26	.32	.26	.3	.35	.33	.34	.33	.32	.29	.31	.22	.29	.34	.32	.29	.32	.25	.28																			
24.ER3	.25	.28	.3	.27	.32	.27	.3	.36	.33	.35	.34	.32	.29	.31	.23	.3	.34	.32	.3	.33	.25	.28	.32																		
25.ER4	.26	.29	.31	.27	.33	.27	.31	.36	.34	.35	.34	.33	.3	.31	.23	.3	.35	.33	.3	.33	.26	.29	.32	.32																	
26.ER5	.25	.28	.3	.26	.32	.26	.29	.35	.32	.34	.33	.31	.29	.3	.22	.29	.33	.31	.29	.32	.25	.28	.31	.31	.32																
27.ER6	.28	.31	.33	.3	.36	.29	.33	.39	.36	.38	.37	.35	.32	.34	.25	.33	.38	.35	.33	.36	.28	.31	.35	.35	.36	.34															
28.ER7	.24	.27	.29	.26	.31	.25	.29	.34	.32	.33	.32	.31	.28	.3	.22	.28	.33	.31	.28	.31	.24	.27	.3	.31	.31	.3	.34														
29.SM1	.23	.26	.28	.25	.3	.25	.28	.33	.31	.32	.31	.3	.27	.29	.21	.28	.32	.3	.28	.31	.24	.26	.29	.3	.3	.29	.33	.28													
30.SM2	.27	.3	.32	.29	.34	.28	.32	.38	.35	.37	.36	.34	.31	.33	.24	.32	.36	.34	.32	.35	.27	.3	.33	.34	.34	.33	.37	.32	.32												
31.SM3	.24	.28	.29	.26	.31	.26	.29	.34	.32	.34	.32	.31	.28	.3	.22	.29	.33	.31	.29	.32	.25	.27	.3	.31	.31	.3	.34	.3	.29	.33											
32.SM4	.22	.25	.26	.23	.28	.23	.26	.31	.29	.3	.29	.28	.26	.27	.2	.26	.3	.28	.26	.29	.22	.25	.27	.28	.28	.27	.31	.27	.26	.3	.27										
33.SM5	.19	.21	.22	.2	.24	.2	.22	.26	.24	.26	.25	.24	.22	.23	.17	.22	.25	.24	.22	.24	.19	.21	.23	.24	.24	.23	.26	.23	.22	.25	.23	.21									
34.SM6	.2	.22	.24	.21	.25	.21	.23	.28	.26	.27	.26	.25	.23	.24	.18	.23	.27	.25	.23	.25	.2	.22	.24	.25	.25	.24	.27	.24	.23	.26	.24	.22	.18								
35.SM7	.24	.27	.29	.25	.3	.25	.28	.33	.31	.33	.32	.3	.28	.29	.21	.28	.32	.3	.28	.31	.24	.27	.3	.3	.31	.29	.33	.29	.28	.32	.29	.26	.22	.23							
36.PI1	.28	.31	.33	.29	.35	.29	.33	.39	.36	.38	.37	.35	.32	.34	.25	.33	.38	.35	.32	.36	.28	.31	.34	.35	.35	.34	.39	.33	.33	.37	.34	.3	.26	.27	.33						
37.PI2	.26	.29	.31	.27	.33	.27	.31	.36	.34	.36	.34	.33	.3	.32	.23	.3	.35	.33	.3	.34	.26	.29	.32	.33	.33	.32	.36	.31	.3	.35	.32	.28	.24	.25	.31	.36					
38.PI3	.29	.32	.34	.3	.37	.3	.34	.4	.37	.39	.38	.36	.33	.35	.26	.34	.39	.36	.34	.37	.29	.32	.36	.36	.37	.35	.4	.35	.34	.38	.35	.32	.27	.28	.34	.4	.37				
39.PI4	.25	.28	.3	.26	.32	.26	.3	.35	.32	.34	.33	.31	.29	.3	.22	.29	.34	.31	.29	.32	.25	.28	.31	.31	.32	.3	.34	.3	.29	.33	.3	.27	.23	.24	.29	.34	.32	.35			
40.PI5	.29	.33	.35	.31	.38	.31	.35	.41	.38	.4	.39	.37	.34	.36	.26	.35	.4	.37	.34	.38	.29	.33	.37	.37	.38	.36	.41	.35	.35	.39	.36	.32	.27	.29	.35	.41	.38	.42	.36		
41.PI6	.31	.34	.37	.33	.39	.32	.37	.43	.4	.42	.41	.39	.36	.38	.28	.36	.42	.39	.36	.4	.31	.34	.38	.39	.39	.38	.43	.37	.36	.41	.38	.34	.29	.3	.36	.42	.4	.44	.38	.45	
42.PI7	.31	.35	.37	.33	.39	.32	.37	.43	.4	.42	.41	.39	.36	.38	.28	.36	.42	.39	.36	.4	.31	.34	.38	.39	.4	.38	.43	.37	.36	.41	.38	.34	.29	.3	.37	.43	.4	.44	.38	.45	.47

Note. N = 10,200 (self-ratings); all correlations statistically significant, $p < .05$.