Emotional Intelligence and Productive Relationships with Patients and Colleagues

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A higher degree of emotional intelligence among health professionals has been shown to result in better patient care and improved well-being of the health professional. For nuclear medicine, the emotional competence of staff and emotional proficiency of institutions are important expectations. Nonetheless, there is a paucity of material outlining purposeful honing of emotional intelligence, or the tools for such development, across the literature. Although the hidden curriculum provides powerful and authentic educational opportunities, incidental or accidental (organic) capability development does not benefit overall professionalism. Deliberate curricula can be achieved through a scaffold of emotional training and immersion programs that allow the nuclear medicine student or practitioner to recognize and foster emotionally safe environments. This requires careful planning to drive the emotional intelligence pipeline. Central to this is an understanding of learning taxonomies. There remain substantial gaps between the most and least emotionally insightful that could be addressed by rich immersive activities targeting emotional proficiency among students and the graduate workforce.

Key Words: emotional intelligence; personality; conflict resolution; interprofessional relationships

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When the interaction between health professionals and patients is positive, there is an improvement in compliance, satisfaction, and outcomes for the patient, and clinical decisions and leadership are enhanced for the health professional (*1–3*). Importantly, a higher degree of emotional intelligence among health professionals has been shown to result in better patient care and improved well-being for the health professional (*4*). Interestingly, one study used an emotional intelligence inventory to report that, among nearly 2,000 diagnostic radiography workers, the highest emotional intelligence was among mammographers and the lowest was among nuclear medicine technologists (*5*).

Emotional intelligence is the acuity of one's own and of others' emotions and the use of this acuity to shape actions, guide attention, and focus motivations with a view toward gaining more productive interactions (*6*). There are 4 general aspects of emotional intelligence (*6*): the emotions need to be expressed, contextualized, understood, and controlled (*6*). Generally, scores for emotional intelligence will be expressed from a global context (overall emotional intelligence) and then from subcategories that include emotionality, sociability, self-control, and well-being. In the often-stressful health-care setting, emotional intelligence among health professions affords situational awareness and the ability to modify interactions to produce more emotionally safe environments for colleagues, self, and patients. In turn, this ability creates more productive, effective, and satisfying interactions. Central to developing emotional intelligence is a rich understanding of and interplay between personality traits: one's own and those of others. It is also important to recognize that emotional intelligence can be associated with intuitive or organic aptitude but can be learned, honed, and engineered for a purpose.

There is a comprehensive inventory of tools and battery of techniques to hone one's emotional intelligence. These range from mindfulness or meditation exercises through purpose-built training programs. In this article, enriching the understanding of individual personality traits and the dynamic between interacting individuals will be explored as one such tool and technique aimed at providing higher-order emotional taxonomies. Central to capability building in emotional intelligence and unpacking personality traits is the capability of health professions to be critically and deeply reflective. Despite the value and importance, there is a paucity of literature providing insights into educational initiatives to develop foundations of emotional intelligence among health professionals, including undergraduate nuclear medicine students.

STREAMLINED PERSONALITY INVENTORY

Generally, personality refers to the characteristics or traits that an individual exhibits when interacting with others (*7*). Health professionals such as those in nuclear medicine interact with patients and colleagues on the basis of spontaneous and unconscious impressions of personality. Clearly, these impressions rely on intuition, lack context, and may lack insight, especially when made under stress (observer or the observed). Indeed, bias and prejudice are likely to confound these interpretations and interactions. For some, informal or formal learning associated with psychology might afford improved accuracy and outcomes. Nonetheless, there remains a paucity of formal training and structured experience in

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understanding personality and applying such insights with emotional intelligence to produce positive relationships and effective conflict resolution. Confounding attempts to develop emotional intelligence is a wide variety of models for classifying personality, varying degrees of complexity of the same, and contradiction among the models. Furthermore, interactions with patients and colleagues might be fleeting, affording little chance for rigorous baseline and trait evaluation. The application of the science associated with personality psychology does not fit the fluid environment in which potential benefits could be produced.

There is a requirement, therefore, to develop an intuitive model that requires a foundation of theoretic insight applied in the dynamic environment. Personality traits and subtraits are complex, and a usable model requires simplification without losing accuracy. There needs to be recognition that any individual may have a mix of personality traits that may change weighting in different situations. The value of honing both the science and the art of emotional intelligence is that emotional competence improves interactions with patients and colleagues, which is vitally important in a patient-facing, personalized medicine environment. Although these insights do not allow changing of the personalities of others, emotional intelligence allows health professionals to adjust patient care or communication to better fit the individual patient: personalized care. In a study of women with breast cancer, investigators showed that understanding patient personality traits allowed more appropriate patient care and interventions (*8*). Emotional intelligence might be thought of as the capability of using casual impressions to objectively predict traits to inform adjustments to communication in real time while being conscious of the nuances associated with personality, the lack of detailed evaluation inventory (e.g., validated question bank), and the potential for a wide variety of biases.

Application of emotional intelligence training and providing students or practitioners with a framework for real-time personality trait assessment needs context. Importantly, these simplified tools vary substantially with intuition and experience and assume the absence of personality disorders. Furthermore, manifestation of personality traits and behaviors will vary with increasing levels of stress for both patients and colleagues (e.g., patient is confronting serious illness). Finally, the health professional observing, or the patient or colleague being observed, can be functioning in varying levels of emotional intensity (magnitude with which emotions are experienced or felt), emotional flux (frequency with which different emotions are experienced or felt), and emotional density (concentration of different emotional stimuli in the environment) or could be confronting emotional exhaustion (burnout), all of which influence the emotional acuity.

There are several well-recognized compact inventories for personality evaluation. At a very rudimentary level, a 2-trait approach might classify individuals as introverts or extroverts. The big 5 using the OCEAN acronym is also common and classifies individuals using the traits openness, conscientiousness, extraversion, agreeableness, and neurosis (*9*). A variation on this model adds honesty as a sixth trait and modifies neurosis to emotionality (HEXACO: honesty–humility, emotionality, extraversion, agreeableness, conscientiousness, openness to experience). A useful 4-trait model using the acronym DISC classifies individuals as a mix of the traits dominance, influence, steadiness, and compliance. The DISC model will be discussed in more detail below.

EMOTIONAL INTELLIGENCE PIPELINE

There are similarities between the emotional intelligence pipeline and the cultural proficiency pipeline previously reported (*10*). At the foundation of patient care and interprofessional relationships is emotional safety. Patients and staff value emotionally safe places characterized by respect. To provide an emotionally safe environment requires more than emotional knowledge and awareness, it demands emotional intelligence through engagement with values and attitudes (Fig. 1). Part of emotional safety in nuclear medicine is related to education of the health professional. The unequal power relationships between health practitioners and patients, and among colleagues, contributes to communication asymmetry.

Broadly, emotional competence is the capacity to respond to variations in emotional needs, values, styles, and circumstances. This includes understanding and respecting variations in individual beliefs, values, preferences, behaviors, thresholds of tolerance and resilience, expectations, compliance, and attitudes. Emotional competence is an important strategy for addressing communication asymmetry and potential conflict for patients and colleagues but requires more than emotional awareness. Emotional competence is the attitudes and behaviors, reinforced through policy and practice, that enable effective productive relationships and effective communication among individuals.

Success in building an emotionally competent health workforce is constrained by a lack of consistent definition and language around emotional competence and lack of evidence of training impact or appropriate performance indicators. Emotional competence requires mastery of the capacity for self-assessment, critical reflection, management of emotional dynamics, emotional knowledge, adaptation of actions, recognition of emotional differences, and understanding the impact difference makes. Recognizing emotional difference and understanding the value that those differences bring to interactions is an important part of emotional competence (Fig. 1). This quality allows easy demarcation from lower levels of emotional development, where differences might be seen as opportunity for exploitation (e.g., bullying) or be inappropriately responded to. Emotional proficiency demands the same capabilities at individual and institutional levels but also requires capacity for emotional humility. Beyond the capabilities of emotional competence, emotional proficiency recognizes differences and is equipped to respond effectively and affirmingly both individually and institutionally (Fig. 1).

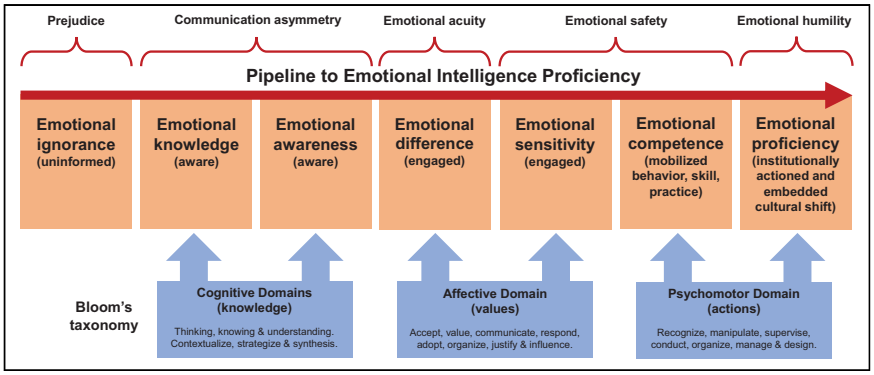

FIGURE 1. Bloom's taxonomy mapped against emotional intelligence proficiency pipeline.

EMOTIONAL INTELLIGENCE TRAINING

Using stand-alone emotional intelligence workshops for health-care workers and students, there have been initiatives that may be seen to satisfy human resource–driven performance metrics to build emotional awareness. More effective programs might develop stronger insights through rich and deep understanding. The journey through emotional awareness to emotional competence or proficiency requires more structured and deliberate learning. Relying on organic development of emotional intelligence among students as they progress through their studies and training has been shown to fail in radiography students, with no difference in emotional intelligence metrics among students followed across 3 y of study at multiple institutions (*11*). At Charles Sturt University, undergraduate nuclear medicine students are provided a preliminary workshop creating awareness and understanding associated with emotional competence. The knowledge is enriched with immersive exercises that are linked to reflective tasks to connect the learning with experience. Students are then released into the clinical environment, where further application and reflection are used to hone emotional intelligence.

The journey for students and health professionals to cultural competence is richer through a cultural immersion style of learning but also relies on appropriate learning taxonomies. Both undergraduate and continuing education training programs across a wide array of topics adopt a cognitive focus. Bloom's cognitive taxonomies are effective to scaffold the learning at lower-order capabilities such as knowing and understanding. Progression to emotional acuity and emotional safety requires attention on Bloom's affective domain, where feelings, attitudes, and values are scaffolded. The step to emotional competence and proficiency requires command of the capabilities of Bloom's taxonomies in the psychomotor domain. Here, the emphasis is on behaviors, skills, and actions (Fig. 1).

THE CHARLES STURT UNIVERSITY EXPERIENCE

At Charles Sturt University, nuclear medicine students participate in workshops that build emotional intelligence and capabilities using the DISC 4-trait model (*12*). DISC is an acronym for dominance, influence, steadiness and compliance although the S has also been defined as social or submission. Classification relies on behavior around risk, pace, focus, self, and response among others. Although useful as a real-time tool, experience suggests that the language introduces bias. Dominance is often viewed as a negative trait, and there is frequently, among students, an inclination to deny having a high degree of dominance as a trait. Indeed, dominance can be associated with bullying and rudeness but it can also produce leadership and decision making beyond the other 3 traits. Conversely, influence is often seen positively as having an impact on others, and students are eager to associate themselves with this trait without considering the deeper meaning. Often, students take offense at being classified as steady or compliant, seemingly implying a boring personality. It is only with deeper immersion in the Charles Sturt University workshop that students appreciate the strengths and weaknesses of each trait and the complex interplay and balance of traits each individual exhibits.

The foundation of the emotional intelligence program at Charles Sturt University is knowledge development, with students learning the theory associated with both emotional intelligence and personality trait assessment. This knowledge is delivered at Charles Sturt University via a tutorial and actually represents the cognitive portion of the taxonomies. Scaffolded to the knowledge is the development of values and acuity in 2 phases, the first being through a workshop and the second via authentic clinical experience with reflection. Ongoing application of the knowledge and skills in the clinical environment, especially during final-year clinical placement and the early years as a qualified practitioner, lead to (for some graduates) emotional competence. Emotional proficiency is modeled in the hidden curriculum throughout the course at Charles Sturt University and reflects institutional emotional proficiency.

The DISC program delivered at Charles Sturt University is not a detailed personality tool but rather provides insight into individual styles to allow prediction of behaviors and an individual's (including self) general approach using an accessible and easily interpreted model. Nonetheless, DISC does not reflect knowledge, skills, or intelligence. There is a diverse array of applications of the skills and capabilities developed in this program. From a student context, including shortly after graduation, it can be used to improve interactions with colleagues and patients to produce more productive outcomes and, in doing so, becomes a powerful career development tool. Charles Sturt University students also use the DISC program to enrich self-awareness and to manage conflict or difficult personalities. This is especially powerful for students or junior staff navigating stressful or hostile clinical environments where they may feel disempowered at the lower end of the hierarchy. In recent research among student diagnostic

radiographers, 21% indicated that the clinical environment negatively impacted their well-being associated with emotionally challenging situations (*13*). Within the clinical dynamic, these tools can be used for conflict resolution, avoiding conflict, producing productive teams, and driving staff morale. Leadership and management can adopt these same tools to recruit the right staff members who will assimilate best into the established workforce and environment, to drive cultural integration, to inform performance management, and to redeploy staff when necessary.

Students are challenged to see the advantage in modifying one's own behaviors to optimize interactions with others. Nonetheless, it is not immediately apparent that a given individual has the range of behaviors to cope with the complexity and variability of patient and colleague interactions. Before breaking down the characteristics of each of the 4 DISC traits, recognition should be made that no trait is better or worse than others, that we all have a mix of all 4 traits, that most of us have 1–2 traits that predominate, that the trait predominance can change with environments, and that there is a large range of subtraits to consider. For example, in the absence of a dominant "I" in a working environment, a typical "S" may morph into an "I" in that environment. Similarly, a "C" may manifest an inner "D" in the absence of a "D" in the working environment.

Dominance is associated with assertiveness, control, and power. The typical "D" wants to be in charge and have the authority to make decisions. A "D" is task-focused and results-focused. Decision making is quick and decisive. A "D" enjoys change and challenges but can lack emotion and can be overbearing, too ambitious and competitive, skeptical, suspicious, and aggressive, particularly when targeting a goal. Harnessed appropriately, a "D" can be a good leader and decision maker who thrives in challenging environments but without considering consequences (including human) before actions. The typical "D" is expressive and extraverted, which can produce communication challenges. Communication lacks detail, is instructive, and can be uncontrolled. When interacting with "D" patients or colleagues, one should focus on results and outcomes, avoid detailed explanations, be prepared by understanding all available information, be assertive and strong so as to not compromise that which is important, be flexible and accommodating and not take anything personally, and give them ownership of an idea to generate vigorous support. Under stress, a "D" can be abrupt, blunt, aggressive, loud, irrational, and rude and can revert to bullying.

Influence is associated with communication style and social interactions. An "I" likes to be the center of attention; is enthusiastic and often talkative, animated, persuasive, and optimistic; interacts positively in most situations; is interested in the emotions and feelings of others; is a confident and good communicator; and adapts to new environments fairly well. Being motivated by relationships and the need to feel accepted, an "I" does not cope well with rejection or exclusion. Although warm and relaxed, "I" individuals do not fit structured environments and follows their own path without considering consequences. When interacting with "I" patients or colleagues, one should be assertive to get them focused, provide praise and approval, utilize their enthusiasm and energy, and be personal and friendly. Under stress, an "I" becomes more talkative, gets flustered, loses focus, imparts blame, sulks, and can become dramatic.

Steadiness is associated with patience, persistence, and thoughtfulness. An "S" is relationship-focused and enjoys teamwork but thrives in relaxed, calm, and supportive environments; does not like change or confrontation; and prefers to have time to plan and execute tasks. An "S" is gentle, open, warm, sympathetic, supportive, and introverted; generally has a small circle of trusted friends; and looks to more socially assertive people to initiate relationships. An "S" has the highest organic level of emotional intelligence; is a good listener, dependable, and loyal; and is good at laborious tasks but needs a support network. Although "S" individuals toil away at tasks, they do not like interruption, tend not to like multitasking, adapt slowly to change or new environments, and can be slow at completing tasks. When interacting with an "S," one should provide reassurance and support, be patient and calm, not introduce surprises, provide detailed information, be organized, and make eye contact during communication. Under stress, an "S" becomes emotional, socially withdrawn, and indecisive and will lose confidence.

Compliance is associated with structure and organization. A "C" sets high standards, likes having time to achieve excellence, is persistent, is eager to improve, and focuses on the detail. "C" individuals can appear emotionally disconnected, impassive, and cold, but this appearance relates to control and reluctance to unnecessarily reveal themselves or information. They are ambitious but use structured rules rather than assertiveness to progress. They are organized and quick-thinking but structured and logical, which means they need certainty before proceeding (risk-averse). A "C" is passive socially, naturally suspicious of others, and develops relationships associated with mutual interests. "C" individuals appreciate (demand) detail, value accuracy and precision (will correct errors others think are inconsequential), are cooperative, and prefer compromise over confrontation. Interactions with "C" individuals require accuracy, patience, consistency, confidence, and a clinical approach (unemotional) but can be enhanced by setting time limits on tasks, praising their expertise, and helping them see the broader context. Under stress, a "C" will become critical, shut down, and stop communicating.

Armed with these insights, students undertake several reflective exercises that require identification of traits among classmates, authentic clinical experiences in which patients or colleagues exhibited specific traits, and identification of one's own balance of traits. When patients are an "I," for example, they may be ignorant of the test and purpose, will answer questions in a convoluted fashion that may be a complete tangent, and are likely to forget information told to them. Communication needs closed questions or

limited-choice questions, staff need to be assertive without being impatient, explaining the process in stages and having the patient repeat instructions back, and instructions might need to be written down. A "D" might be aggressive, try to take charge, and give the impression that staff are an inconvenience. Assertiveness is required without being unprofessional, and one should stay focused, provide a concise explanation, and not take it personally. An anxious patient exhibiting traits of a "C" or "S" could appear distracted and noncommunicative. Here, open questions might be used to draw the patient out. Eye contact, a friendly disposition, and reassurance is needed to gain confidence and trust. A summary of DISC traits and actions is outlined in Table 1 and Figure 2.

Students are challenged to consider interactions between dominant traits and compatibilities. This reflection should go beyond the clinical environment to include relationships associated with sport, family, and friends. For example, a classic "D" or "C" is effective in individual sports and in working alone whereas "S" and "I" personalities are more receptive to a team environment. Although a "D" and an "S" are opposites, they can also be complementary, remembering that an "S" will look to a "D" or "I" to initiate a relationship. Nonetheless, students generally identify situations in which an "S" is directly or incidentally bullied by the actions of a "D." Although a "D" and a "C" are task-focused, they can clash over structure, pace, process, and detail. A "D" can assume the credit for a group task, whereas a "C" in the group will covertly manipulate the environment to not only reveal the error but also expose the actions of the "D." Group work is a key capability in any undergraduate course, and students quickly adapt their understanding of DISC to reflect on group dynamics: the "D" who takes over the project, the "I" who wants to be center stage without contributing, the "S" who brings snacks to make everyone feel better, and the "C" who tries to redo the work of others to a higher standard. The complexity of this simple 4-trait model and the richness of its use are exhibited in the following reflection (from a student assessment):

> I identify all 4 traits as dominant in different scenarios. The nature of my work in radiation really draws out the "C" in me, and it has allowed me to excel in my career. Realizing I have been overlooked for leadership positions, I have been consciously tapping into my inner "S" and "D" at various times. This is fairly natural because I lean on my "D" characteristics when I play sport, including as team captain, and I fill the otherwise vacant "S" role among my family that has been referred to as the glue keeping everything together. But I have a narrow circle of trusted friends among whom I feel safe enough to lower barriers, and that is when my inner "I" is revealed. Otherwise, I am socially withdrawn in the absence of alcohol. Sometimes I felt like multiple people, and certainly people in different aspects of my life see me very differently, but it was not until I understood DISC that I could provide this insight; until now, these different trait manipulations were accidental. I also see now that my strongest relationships are built with those that are predominantly "S," I clash strongly when a "D" is aggressive or rude to others, and without clashing, I tend to be irritated by those that are predominantly "I." When challenged, stressed, or confronted, my default position is the safety of my inner "C."

A key part of patient care, good teamwork, and emotional intelligence is the ability to listen and observe. An "S" and a "C" tend to be good listeners, observant, and appreciative of detail. Conversely, a "D" and an "I" are poor listeners and pay little attention to detail. Nevertheless, an "I" and a "C" together are best equipped to convert this knowledge (cognitive domain) to actual emotional intelligence (psychomotor domain). To be better health professionals and colleagues, there is a need to balance the 4 traits to ensure that, regardless of predominance, there is enough balance in other traits to ensure emotional intelligence.

One of the intriguing aspects of DISC for students studying science-based courses is the conversion of the DISC model from psychology to biology. Although DISC was developed in 1923, 2005 saw the development of the Fisher temperament inventory (*14*), which classifies personality traits on the basis of biochemical predominance. Fisher identifies 4 key traits (Fig. 3): directing, exploring, negotiating, and building. Directors are testosterone-dominant, with a tendency to be logical, decisive, and skeptical and to have a direct communication style that is very much like the "D" trait in DISC. Explorers are dopamine-dominant, with a tendency to be risk takers, creative, spontaneous, energetic, optimistic, and impulsive, as aligns closely with the "I" trait of DISC. Negotiators are estrogen-dominant and rely on social skills, empathy, and relationship building, as matches the "S" in DISC. Builders are serotonin-dominant and like structure, routine, and conformation to rules, as is similar to the "C" in DISC. Fisher uses these traits to describe compatibility among romantic partners, for whom opposites attract and like attracts like. That is, other than attraction between people with the same trait, builders and explorers attract and directors and negotiators attract. This recognizes the same opposition in DISC, with "D" and "S" being opposites but often forming productive teams or relationships whereas the "C" and "I" of DISC mirror the builders and explorers of the Fisher temperament inventory. Whether biochemical or psychosocial, a degree of care needs to be exercised when managing conflict or teamwork between DISC-based "C" and "D" traits (builders and directors in the Fisher temperament inventory) and between "S" and "I" traits (negotiators and explorers in the Fisher temperament inventory).

CONFLICT RESOLUTION

Communication is the key to emotional intelligence and conflict resolution. Although there are several approaches to conflict resolution, emotionally intelligent people will focus on the issue, not the person, and will be honest, assertive but controlled, and agreeable and understanding. They will listen and acknowledge all perspectives, avoid being drawn

TABLE 1
Variables Associated with DISC Traits

Variable	D	I	S	C
Motivation	Power, authority, outcome, success	Attention, friendship, fun	Relationship building, people helping, appreciation	Consistency, value, excellence
Key value	Power	Recognition	Approval	Respect
High priorities	Action, results, achievement	Enthusiasm, collaboration, action	Support, stability, collaboration	Attention to detail, use of expertise, knowledge growth
Low priorities	Relationships	Routine	Change	Relationships
Task focus	Get immediate and fast results	Do not rush but make it fun	Form team and take time to complete	Do it yourself and do it properly
Comfort needs	Dominance and challenge	Recognition and interaction	Appreciation and service	Quality and accuracy
Response style	Reactive	Reactive	Reflective	Reflective
Risk approach	Does not consider consequences	Does not consider consequences	Is risk-averse	Is risk-averse; assesses risk
Dynamic style	Nature	Nurture	Nurture	Nature
Fears	Losing control, being vulnerable, appearing weak	Being rejected, ignored, or disapproved of	Experiencing change, disharmony, conflict	Being criticized, making errors, showing excess emotion
Actions	Confident, direct, insensitive, impatient	Charismatic, optimistic, impulsive, disorganized	Patient, teamwork, indecisive, accommodating	Skeptical, precise, analytic, critical, isolated
Strong skills	Decisive	Persuasive	Diplomatic	Problem solver
Weak skills	Listening	Checking	Initiating	Deciding
Conflict default	Demands own way	Makes personal attack	Complies	Avoids confrontation
Stress default	Takes charge	Is argumentative	Is withdrawn	Seeks more data
For productive interactions	Lets them take charge	Gets them excited	Provides support	Provides information
Avoiding conflict	Not being competitive	Letting them get ahead	Relaxing and not pressuring them	Letting them set pace
Conflict follow up	Results	Attention	Support	Service
Effort areas for interactions	Concise and efficient	Interesting and interested	Cooperative and supportive	Accurate and idea generator
Supporting them	Empower	Encourage	Care	Provide structure

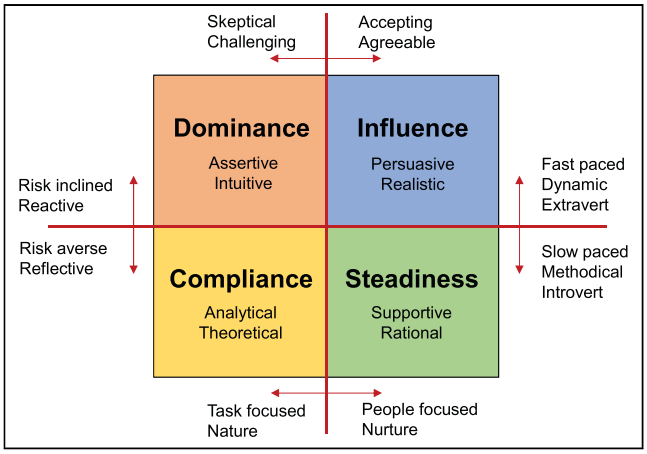

FIGURE 2. Characteristics of DISC traits.

into an argument, offer blameless but sincere apology, and provide action. As an exercise, students at Charles Sturt University are asked to role-play a variety of scenarios of conflict with patients or colleagues. They are encouraged to consider the context and draw on authentic experiences to explain exactly how they feel, describe the specific action that made them feel that way, and describe the impact this or repeated incidents will have. This method creates accountability without the need for assertiveness. For example, an event that is not so uncommon is a student being openly criticized or rebuked in front of staff or patients. Disempowered students lack the inventory to express their concerns or to challenge the behavior, with a possible result being that they learn and repeat these behaviors when they are supervising students in the future. An understanding of DISC allows an emotionally intelligent student to identify specific traits and likely drivers and to privately express something to the effect of "I appreciate your feedback and interest in helping me develop my clinical skills, but when you openly criticize me in front of patients I feel humiliated and unprofessional, which undermines my confidence and the respect patients and other staff have for me."

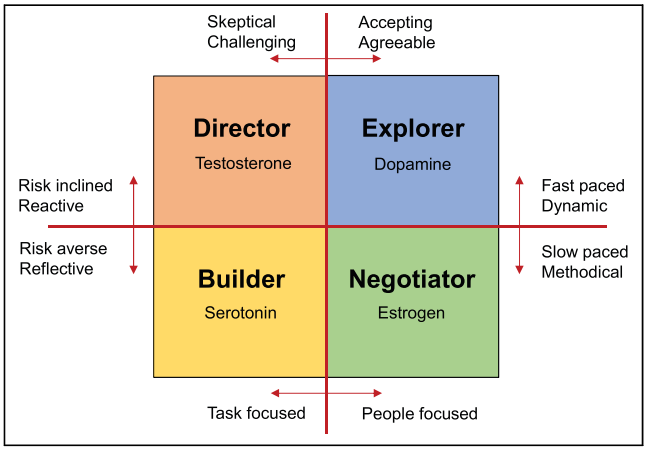

FIGURE 3. Characteristics of Fisher temperament inventory traits match closely those of DISC.

Unsurprisingly, conflict resolution can adopt several strategies that align with the characteristics of the various DISC traits (Fig. 4). Emotional intelligence allows improved conflict resolution by finding a balance or middle ground. The compromise accommodates the DISC traits of all parties involved in the conflict and provides a model for proactive prevention of conflict. Emotional intelligence at the initiation of group work, for example, allows preemption of issues and mitigation of initiated actions.

Students at Charles Sturt University are challenged to understand their own personality traits and communication style more deeply. Although real-time analysis is useful in honing interpersonal skills as described above, a strong foundation underpinned by deeper insight into self ensures that interactions and conflict resolution are initiated from a sound platform. Table 2 provides a series of descriptors for DISC traits. With omission of row 1 in the table, so that students would not know which descriptors apply to which traits, the students would be asked to check off those that apply to themselves. A simple summation of the number of ticks in each column represents the weighting of the DISC trait. Once students have determined and debated their balance of traits, they should be challenged to consider how they might best modify their own behaviors in order to get the most out of interactions with others, including those with the same trait dominance (Table 3). These then become the foundation for authentic capability development in the clinical environment, and students are encouraged to reflect on their learning, their interactions, and how emotional intelligence helped or could have improved the scenario. This represents honing of the psychomotor skills required for emotional competence.

Students need to consider their own dominant traits and learn to modify their behavior to accommodate the needs of patients and staff. For example, students with predominantly "D" traits are likely to clash with most patients and staff through ego, impatience, or communication differences.

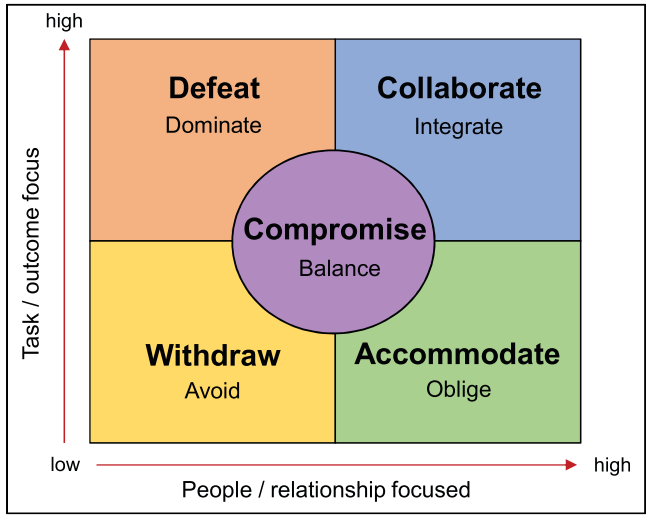

FIGURE 4. Task- vs. people-focused conflict resolution strategies match closely those of DISC.

TABLE 2
Inventory for Self-Determining DISC Trait Balance (Adapted from (*15*))

D	I	S	C
Action-orientated	Ambitious	Adaptable	Accurate and precise
Adventurous	Creative	Calm and relaxed	Cautious
Competitive	Energetic	Team-oriented	Conscientious
Controlling	Enjoys change	Supportive	Consistent
Decisive	Enthusiastic	Enjoys popularity	Detailed
Firm or forceful	Friendly and fun	Enjoys routine	Enjoys instruction
Results-oriented	Impulsive	Good listener	Factual
Independent	Group-oriented	Loyal	Impersonal
Assertive	Initiator	Not demanding	Inquisitive
Quick to judge	Inspirational	Nurturing	Logical
Persistent and determined	Confident	Patient	Orderly and systematic
Productive	Emotional	Trusting	Organized and controlled
Purposeful	Mixes easily	Organized	Perfectionistic
Seeks power	Motivator	Respectful	Persistent
Self-reliant	Optimistic	Sensitive	Analytic
Direct	Animated	Sympathetic	Problem solver
Strong-willed	Spontaneous	Thoughtful	Scheduled and organized
Takes control	Takes risks	Tolerant	Sensitive

When dealing with staff or patients who are any of the 4 DISC traits, the students would be wise to channel their "S." Conversely, if students are predominantly an "S" and working in an environment dominated by a "D," "I," or "C," the capacity to draw on their own "D," "I," or "C" could bring balance that allows productive interactions. A working example might be a student trying to get a supervisor to sign off that the student has met a capability or standard. A "D" supervisor might appreciate the comment, "You asked me to spend time with person X performing bone scans so you can sign my paperwork. Is that OK to do now?" An "I" might appreciate the comment, "I have really enjoyed shadowing you while you do bone scans and picked up some amazing techniques that have enhanced the way I do things." For an "S," a small gesture could be provided such as a card or a note of thanks expressing, "I could not have learned so much without your amazing support. I wish all supervisors were like you." Finally, the "C" will be the most difficult. Students should be prepared to answer questions and provide firm details on how many procedures have been completed, such as "I have read the standards and have performed X bone scans that meet category A and Y bone scans that meet category B, with all paperwork and reflections completed and submitted, but would appreciate your scrutiny to determine whether I am ready for sign-off." Similar application of DISC and emotional intelligence can help improve patient compliance and satisfaction as evidenced in the following reflection (from a student assessment):

> A patient arrived 15 minutes late. I observed that the patient was agitated and aggressive, and I wondered what the root

TABLE 3
Interactions Associated with DISC Traits

Individual communicating	Individual being communicated with			
	D	I	S	C
D	Avoid ego collision and be flexible enough to compromise	Invest time in socializing and be open and friendly	Slow pace, soften tone, and provide support and assurance	Provide facts but be patient, firm, and decisive
I	Be concise, respect personal space, and do not take it personally	Do not compete for recognition or attention; focus on issue	Earn trust without being overly social; provide support and assurance	Provide facts, do not bluff, and respect personal space
S	Be confident, do not take it personally, but do not be intimidated	Accept their enthusiasm and friendliness but do not waste time	Be assuring, confident, and assertive to expedite time lines	Be confident, provide facts, and do not be discouraged by skepticism
C	Avoid too much detail and focus on key points and results	Be friendly and enthusiastic, avoid detail, and focus on person	Allow time for information to be digested; be friendly and assuring	Stay in control, consider all perspectives, and do not let discussion drag on

cause was. Were they exhibiting "D" traits, or were they an "I" under stress? As a student predominantly an "S," I did not have the confidence to ask, as I felt intimidated by the situation. I should have taken the initiative and tried to determine if the patient was OK and thus should have recognized the need to have professional confidence to better help patients and staff. I think better interpersonal skills, communication, and emotional intelligence could have helped improve outcomes. The overall mood for the day changed, as did the team work. I felt upset that I had failed the patient in some way. I could imagine the patient was stressed and anxious about the seriousness of the health situation and that a wider emotional intelligence inventory would have been well received. The scenario helped me understand that my "S" predominance helps me empathise with the patient and potentially provide quality care. Realising this for the first time allowed me to proactively push myself to find the inner "D," "I," or "C" when appropriate. Several patients over the subsequent week were also difficult for their own reasons, and I actively channeled my "D" instead of being passive, which gave me the confidence to be active and with that deliver the "S"-based care. The patient experiences were improved by my understanding and application of DISC, and my confidence and capability were enhanced.

Armed with these basic skills and insights, there is an opportunity to participate in a workshop before students encounter an authentic clinical environment. Classes are generally divided into large groups of 6–8 students to ensure there is a reasonable blend of DISC traits. A simple task of classification or ranking can then be used for individuals to score and then, by negotiation, for the group to settle on a score that represents group consensus. The grounded-truth rank can be used to sum the differences from that grounded truth for both the individual and the group. The comparison of difference scores between the individual and the group may reflect their ability to influence the other members of the group. Nonetheless, the most important learning from the task is the student reflections on group dynamics and how emotional intelligence was used within the task. One such activity is the "lost at sea" ranking exercise (https://insight.typepad.co.uk/lost_at_sea.pdf).

CONCLUSION

Emotional intelligence is a powerful tool in enhancing interactions with patients and colleagues. Although some have organic capabilities in emotional intelligence, there is a need to deliberately integrate skills and capabilities in curricula of nuclear medicine programs and, more broadly, across the health sector. Formal curricula in emotional intelligence promote patient advocacy, improve outcomes, and are consistent with the philosophy of personalized medicine. Rich immersive professional development activities targeting emotional proficiency using cognitive, affective, and psychomotor taxonomies could readily be woven into didactic and authentic learning environments in undergraduate programs and in continuing education activities for those already in the workforce.

DISCLOSURE

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