


Non-cognitive measures of emotional and social intelligences and grit and their influence on work behavior among inbound call center agents in IT-BPO companies in Davao Region

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Article Info	ABSTRACT
<p>Article history:</p> <p>Received March 11, 2024 Revised October 8, 2024 Accepted December 21, 2024</p> <p>Keywords:</p> <p>emotional intelligence social intelligence grit work behavior inbound call center agents business process outsourcing Davao Region</p> <p>JEL Classification:</p> <p>J24, J28, L86</p>	<p>This study explored the influence of emotional intelligence, social intelligence, and grit on the work behavior of inbound call center agents employed in selected IT-BPO firms in Region XI. Guided by Goleman's Emotional Competence Framework, the Tromsø Social Intelligence Scale, and Duckworth's Grit Scale, the study utilized a quantitative-correlational design to examine the predictive relationship among these psychosocial constructs. Data were gathered from 400 respondents across six IT-BPO companies and analyzed using correlational and stepwise multiple regression procedures. Findings revealed that all three variables—emotional intelligence, social intelligence, and grit—were significantly associated with work behavior. However, only emotional intelligence and grit emerged as significant predictors of work behavior in the final regression model. These results underscore the critical role of emotional regulation and perseverance in shaping productive workplace behavior among call center professionals. The study contributes to the growing body of organizational behavior literature by highlighting the psychological competencies that underpin effective employee performance in high-stress service industries.</p> <p><i>This is an open access article under the CC BY-NC license.</i></p> <div></div>
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1. INTRODUCTION

In today's dynamic knowledge economy, the global labor market increasingly values competencies beyond technical skills, giving rise to a renewed emphasis on non-cognitive attributes such as emotional intelligence, social aptitude, and perseverance or grit. These human capital elements have been widely recognized as fundamental predictors of individual success in modern

organizations, particularly in service-intensive industries (e.g., Agrawal, Chukkali & Singh, 2022; Cuevas, 2020; Haist, 2021; Lastner, Peasley & Pelletier, 2022). Emotional regulation, social agility, and resilience are becoming indispensable assets, especially in high-pressure, client-facing occupations (Pelz, 2024). The Business Process Outsourcing (BPO) industry, as a service-centered sector, exemplifies this trend, wherein workers are routinely exposed to fast-paced, emotionally demanding interactions with customers across cultural and time-zone boundaries (Amoozegar et al., 2025; Johnson, 2023).

Globally, the BPO industry has become one of the fastest-growing economic segments, catalyzed by the evolution of high technologies and the drive for operational efficiency (Businessworld, 2018). The global market for outsourced services reached an estimated value of \$88.9 billion in 2017, underscoring the sector's role in reshaping global employment. A substantial portion of this workforce comprises call center agents, especially in countries like the Philippines, India, and other Southeast Asian economies. With mounting pressures for responsiveness and service consistency, employees often face high levels of emotional labor and role stress. In particular, inbound call center agents bear the brunt of handling complaints, resolving concerns, and managing customer aggression, leading to significant risks of emotional exhaustion and psychological distress (Marshall, 2024; Martinez, 2023; Xu, 2023).

In the Philippine context, the BPO industry has become a pillar of economic resilience and employment generation (Abara & Heo, 2013). However, this success comes with challenges, especially related to the mental health and work behavior of its human resources. Studies have documented the widespread incidence of burnout, anxiety, depression, and other psychological difficulties among call center agents in Metro Manila and regional hubs (e.g., Amit & Ultra, 2020; Charoensukmongkol & Puyod, 2022; Montalbo, 2016; Santiago et al., 2021). Emotional dissonance—where there is a misalignment between one's felt and expressed emotions—remains a critical issue, fueling turnover, cynicism, and disengagement (Jabutay, 2018). In fact, these studies all reported that BPO employees report elevated stress levels due to overwork, unachieved performance goals, and interpersonal conflict. These stressors, when left unaddressed, translate to high attrition rates and weakened organizational productivity.

Focusing on the regional context, Region XI (Davao Region) has witnessed a steady rise in the presence of BPO firms, particularly in Davao City (Legaspi, Reyes & Reyes, 2024). While the industry promises economic uplift, there remains a scarcity of data exploring the psychological and behavioral effects of call center work among its local labor force. Castro and Deluna (2013) and later Serilla et al. (2022) reported elevated attrition in Davao's voice-based services sector, attributing it to job stressors such as long work hours, emotional strain, and health-related issues including anxiety, hypertension, and insomnia. Despite this pressing concern, there has been limited empirical research in the region specifically addressing how non-cognitive traits interact to influence the work behavior of inbound call center agents. This research thus fills a significant gap by examining the roles of emotional intelligence, social intelligence, and grit as predictors of work behavior among inbound call center agents in selected IT-BPO firms in Davao Region. While prior studies have highlighted these variables individually, few have assessed them collectively and within a structural framework contextualized to the BPO setting.

Given the emerging challenges associated with employee attrition, emotional strain, and productivity issues in the IT-BPO industry, particularly among inbound call center agents in Davao Region, this study seeks to determine how key non-cognitive traits influence the work behavior of this specific workforce segment. In light of the increasing recognition of psychological capital in shaping employee outcomes, the study aims to explore the levels of emotional intelligence, social intelligence, and grit among inbound call center agents among IT-BPO companies, and how these constructs relate to their work behavior. Emotional intelligence is examined through five domains: self-awareness, handling emotions, self-motivation, empathy, and interpersonal relations. Social intelligence is analyzed in terms of social information processing, social skills, and social awareness. Grit, as a psychological trait, is operationalized through the dimension of resilience. Work behavior, the primary outcome variable, is assessed through task behavior, contextual behavior, and productive

behavior. The study further investigates whether emotional intelligence, social intelligence, and grit are significantly associated with work behavior, and whether these variables individually influence work behavior when tested for predictive strength. Through this inquiry, the research endeavors to contribute evidence-based insights that can support strategic human resource development in the high-pressure, emotionally demanding environment of the call center industry in the Davao Region.

Ultimately, the study aims to contribute to the evolving discourse on strategic human capital development by identifying the most influential non-cognitive traits that shape work behavior. It is hoped that the results will empower human resource professionals to adopt evidence-based interventions that nurture these psychological capacities, thus optimizing both employee well-being and organizational performance in the ever-challenging IT-BPO landscape.

2. RESEARCH METHOD

2.1 Research Design

This study adopted a quantitative descriptive-correlational research design utilizing a cross-sectional time horizon, which is widely recognized as appropriate for examining associations among latent psychological constructs within a defined population at a single point in time (Creswell & Creswell, 2017). A descriptive design was employed to ascertain the levels of emotional intelligence, social intelligence, grit, and work behavior among inbound call center agents, thereby providing a baseline understanding of their non-cognitive profiles and workplace conduct. The correlational component was used to determine the degree and direction of relationships among these constructs without manipulating any variables, making it suitable for studies where experimental control is not feasible (Gay, Mills, & Airasian, 2012).

Given the multidimensional nature of the variables involved, this design allowed for both breadth and depth of analysis, enabling the identification of significant patterns and trends (Bryman, 2016). Furthermore, the use of this approach is supported in organizational and psychological research where the goal is to uncover naturally occurring associations among constructs such as emotional intelligence and work behavior (Bar-On, 2010; Mayer, Caruso & Salovey, 2016). The cross-sectional design ensured that the data collection was efficient and minimized temporal bias, which is crucial in fast-paced work environments like call centers. This methodological alignment ensures both internal validity and practical applicability of the findings in the context of human resource management and occupational psychology.

2.2 Respondents

In accordance with Sekaran's (2013) principle on the unit of analysis, this study selected the inbound call center agents of IT-BPO companies in Region XI as the primary focus of data aggregation and interpretation. The unit of analysis thus lies at the individual employee level, with the call center industry as the contextual frame. These employees were selected for their direct engagement in inbound call services, which require high levels of emotional labor and interpersonal adaptability, making them ideal candidates for assessing the influence of non-cognitive variables such as emotional intelligence, social intelligence, and grit on work behavior.

A total of 400 inbound call center agents from six large IT-BPO companies in Region XI constituted the sample, derived through Cochran's (1963) formula for determining sample size with a 5% margin of error and a 95% confidence level. The population of inbound agents across the selected firms was 5,795. The formula yielded a required minimum sample size of 385, which was rounded up to 400 to enhance statistical power and representation.

To ensure proportional representation and to maintain the internal validity of the sample, a stratified random sampling technique was employed (Foley, 2018). The population was stratified based on company affiliation, with the proportion of participants from each company corresponding to the company's population share relative to the total regional population. Within each company stratum, respondents were randomly selected to mitigate selection bias and ensure that all segments of the population had an equal chance of inclusion. This method is recommended for large heterogeneous populations to reduce sampling error and increase precision (Lohr, 2021).

Eligibility criteria were defined to ensure homogeneity and contextual relevance: participants must be currently employed or previously employed (within the last six months) as inbound call center agents, having completed at least six months of tenure in the BPO industry. This criterion aligns with literature indicating that a minimum of six months is sufficient for the development of job-specific psychological and behavioral patterns (Nunnally, 1978). The inbound role was specifically emphasized due to its heightened requirement for customer engagement, emotional regulation, and service delivery, which are all closely linked to the constructs examined in this study.

The selected companies—coded here as Companies A through F to maintain organizational confidentiality—are leading players in the global outsourcing industry, each operating at a substantial scale in Region XI. Company profiles varied by service portfolios, workforce size, and operational scope, with the largest employer (Company A) contributing 22% of the sample and the smallest (Company F) contributing 9%. This variation ensured that the study could capture a diverse array of organizational cultures and employee experiences while maintaining sample representativeness.

Table 1. Summary of Selected IT-BPO Companies

IT-BPO Companies in Davao Region	N	%	n
Company A	1,300	22%	88
Company B	1,200	21%	84
Company C	1,150	20%	80
Company D	1,045	18%	72
Company E	600	10%	40
Company F	500	9%	36
Total	5,795	100%	400

Table 1 detailed the proportional allocation of respondents per company. The sample distribution was calculated by computing each firm's share of the total population and applying this proportion to the sample of 400. This yielded the following sample sizes per company: Company A (n=88), Company B (n=84), Company C (n=80), Company D (n=72), Company E (n=40), and Company F (n=36). This careful stratification supports the generalizability of the results within the Region XI BPO sector and reinforces the empirical robustness of inferential statistical analyses to be employed in the study.

2.3 Instruments

To comprehensively examine the influence of non-cognitive traits on the work behavior of inbound call center agents, this study utilized a structured, adapted survey instrument encompassing four major constructs: Emotional Intelligence, Social Intelligence, Grit, and Work Behavior. All the instruments employed have been previously developed, validated, and psychometrically tested in earlier studies, and were further assessed in this research to ensure contextual appropriateness for the IT-BPO sector in the Philippine setting.

Emotional Intelligence Scale. The Emotional Intelligence (EI) Scale used in this study was adapted from the Emotional Competence Inventory (ECI), a robust 360-degree feedback tool originally developed by Boyatzis, Goleman, and Rhee (2000). The ECI is grounded in Goleman's emotional intelligence model and Boyatzis' Self-Assessment Questionnaire (SAQ), which both emphasize the practical application of emotional competencies in the workplace. The version used in this study comprises 50 items across five dimensions: self-awareness, handling emotions, self-motivation, empathy, and interpersonal relationships. Respondents were asked to rate their agreement with statements using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). These ratings reflect the degree to which respondents believe they possess certain emotional competencies. Finally, this multidimensional scale provides a holistic assessment of how individuals perceive and manage their own emotions and the emotions of others—key attributes in emotionally demanding customer service environments like inbound call centers (Goleman, 1998; Mayer, Salovey, & Caruso, 2000).

Social Intelligence Scale. To measure Social Intelligence (SI), the study adopted the Tromsø Social Intelligence Scale (TSIS) developed by Silvera, Martinussen, and Dahl (2001), which has been widely utilized to assess interpersonal functioning across various contexts. This three-factor instrument includes 21 items measuring social information processing, social skills, and social awareness. Responses were collected using a five-point Likert scale ranging from 1 (Not Like Me at All) to 5 (Very Much Like Me). Interpretations are based on categorizing responses into five ordinal levels from "Very Low" to "Very High" social intelligence.

Given the nature of call center work—which involves constant social interaction, rapid emotional appraisal, and empathic communication—the TSIS is a theoretically and empirically appropriate measure (Riggio, 1986; Cantor & Kihlstrom, 2000). It offers critical insights into how well agents understand, interpret, and respond to social cues in professional service encounters.

Grit Scale. Grit was assessed using the ten-item Grit Scale developed by Duckworth et al. (2007), which measures an individual's perseverance and passion for long-term goals. This unidimensional scale includes items that tap into consistency of interest and perseverance of effort. The Grit Scale has been validated across diverse populations and is particularly relevant in understanding employee persistence in high-turnover sectors such as the business process outsourcing (BPO) industry (Duckworth et al., 2007). Its inclusion in this study allows the exploration of motivational stamina as a predictor of work behavior.

Like the other instruments, a five-point Likert scale was used, ranging from 1 (Not Like Me at All) to 5 (Very Much Like Me). Interpretations are based on categorizing responses into five ordinal levels from "Very Low" to "Very High" grit.

Work Behavior Scale. Work Behavior was assessed using a modified version of the Individual Work Performance Questionnaire (IWPQ) developed by Koopmans et al. (2012). The version used comprises 18 items representing three dimensions: task performance, contextual performance, and adaptive behavior. This scale is particularly suited to the dynamic environment of IT-BPO firms, where employees are expected to meet performance targets, adapt to client-specific protocols, and contribute positively to organizational climate (Koopmans et al., 2011; Rotundo & Sackett, 2002). Its dimensional structure enables nuanced measurement of different aspects of performance beyond mere productivity.

Respondents indicated the frequency of their work-related behaviors using a five-point Likert scale from 1 (Never) to 5 (Always). Interpretations are based on categorizing responses into five ordinal levels from "Very Low" to "Very High" work behavior.

Validation and Reliability Testing. To ensure cultural and contextual relevance, all adapted instruments underwent expert validation by three professionals with specialization in organizational behavior, psychology, and human resource development. The instruments were evaluated for content relevance, clarity, and applicability to the local setting. The average validation score was 4.57 out of 5.00, categorized as "Excellent" based on the expert rating scale, confirming the appropriateness of the tool for use among inbound call center agents in Davao Region.

For reliability assessment, a pilot test was conducted among 30 call center agents who were not included in the final sample. The overall Cronbach's Alpha coefficient for the full instrument was .954, surpassing the minimum threshold of .70 suggested by Nunnally (1978) and aligning with more recent guidelines on internal consistency by Tavakol and Dennick (2011). These results provide strong evidence of the scale's reliability and internal coherence across all items and constructs.

2.4 Data Collection Procedure

In the process of data gathering, strict adherence to ethical standards was observed to ensure the protection of the rights and welfare of the respondents and any parties involved in the study. The entire data collection process followed the protocols established by the AdDU School of Business and Governance Graduate School to uphold integrity and transparency in research conduct. Prior to initiating contact with prospective participants, the conduct of the study obtained institutional approval. The Assistant Dean reviewed and approved the research proposal based on institutional guidelines. Subsequently, the research topic was made public through an announcement in a local newspaper, in compliance with transparency protocols, and was then presented before a research

panel for thorough scrutiny and formal approval. Following these institutional requirements, formal communications were sent to selected IT-BPO companies in Region XI, requesting permission to administer the survey among their inbound call center employees.

Ethical considerations guided every step of the process. Consent was obtained through formal communication with company management, and questionnaires were distributed with an accompanying cover letter that clearly stated the purpose of the study, emphasized voluntary participation, and guaranteed anonymity and confidentiality. Participants were informed that they had the right to withdraw at any point without penalty. The identities of the respondents and the companies were anonymized by assigning codes to protect their privacy. No personally identifiable information was included in any reports, publications, or presentations stemming from this research.

Voluntary participation was central to the study's ethical approach. Respondents were briefed on the objectives of the research, and any foreseeable risks were disclosed. The researcher also explained the potential benefits of participation, particularly the opportunity for self-reflection on their non-cognitive skills. Throughout the study, participants' autonomy and ethical rights were fully respected. To ensure data integrity, the researcher exerted substantial effort in retrieving all distributed questionnaires, personally and with the assistance of trained research aides, aiming for a 100 percent retrieval rate. The returned questionnaires were carefully organized, collated, and subsequently subjected to tabulation for analysis. Statistical treatment was then applied, and the results were interpreted in light of the study's objectives, ensuring that conclusions drawn were empirically supported and aligned with the research problem and hypotheses.

All research records were stored securely. Hard copies of documents were kept in locked cabinets, while electronic files were password-protected and accessible only to the researcher. Data retention followed institutional policy, which mandates the secure preservation of data for a specified duration. Upon completion of the retention period, all data will be disposed of in accordance with the Ateneo de Davao University's guidelines, using secure and appropriate methods depending on the data format.

2.4 Ethical Considerations

The study observed full ethical standards in administering the study and underwent examination and approval from the Ateneo de Davao University School of Business and Governance as well as the selected IT-BPO companies in Davao City.

3. RESULTS AND DISCUSSIONS

3.1. Emotional Intelligence Among Inbound Call Center Agents

Table 2 presents the descriptive statistics on the level of emotional intelligence (EI) among inbound call center agents employed in IT-BPO companies in Region XI. The overall mean score for emotional intelligence was $\bar{x}=3.86$ ($SD=0.44$), indicating a *high level of emotional intelligence* among the respondents based on the study's interpretive framework. This suggests that, on average, employees demonstrate considerable proficiency in understanding, managing, and leveraging emotional dynamics in workplace settings.

Table 2. *Descriptive statistics on the level of emotional intelligence of inbound call center agents in the IT-BPO Industry in Region XI*

Indicators	Mean	SD	Descriptive Rating
self-awareness	3.96	0.56	high level of self-awareness
managing emotions	3.64	0.53	high level of managing emotions
motivating oneself	3.91	0.54	high level of motivating oneself
empathy	3.88	0.53	high level of empathy
interpersonal relations	3.93	0.57	high level of interpersonal relations
Overall	3.86	0.44	high level of emotional intelligence

Disaggregating the results by domain, the highest mean was observed in self-awareness ($\bar{x}=3.96$, $SD=0.56$), followed closely by interpersonal relations ($\bar{x}=3.93$, $SD=0.57$) and motivating oneself ($\bar{x}=3.91$, $SD=0.54$). This pattern underscores that respondents are most confident in recognizing their own emotions, maintaining social harmony, and sustaining personal drive—elements that are crucial for high-functioning interpersonal and intrapersonal dynamics in emotionally demanding environments such as call centers (Goleman, 1998). Meanwhile, empathy was rated slightly lower ($\bar{x}=3.88$, $SD=0.53$), although still within the “high” category, indicating that agents are generally attuned to the emotions of others. Notably, managing emotions yielded the lowest mean among the subdimensions ($\bar{x}=3.64$, $SD=0.53$), suggesting a relative challenge in regulating emotional responses under stress, although still within a high interpretive range.

These findings respond directly to the research question that sought to determine the level of emotional intelligence among the target respondents. The overall high level of EI implies that call center agents, particularly during their early years of employment, possess strong foundational emotional capacities that can be leveraged to enhance performance, reduce burnout, and improve retention. This aligns with Goleman's (1998) conceptualization of EI as a composite of emotional competencies that foster both individual resilience and workplace adaptability. However, when considered in light of prior literature, such as the findings of Montalbo (2016), who reported high turnover and burnout among tenured agents, the current results offer a counterpoint by illustrating that EI remains robust during the early stages of employment. Montalbo's findings indicated that burnout was more prevalent among employees with 1–5 years of tenure, suggesting that EI may deteriorate over time if left unsupported. Hence, while this study confirms the presence of high emotional intelligence among new or relatively less-tenured employees, it also invites further inquiry into longitudinal changes in EI across different career phases and how targeted interventions can sustain emotional competence over time.

3.2. Social Intelligence Among Inbound Call Center Agents in the IT-BPO Industry

Table 3 presents the descriptive measures assessing the level of social intelligence among inbound call center agents employed in selected IT-BPO companies across Region XI. The findings indicate that the respondents exhibit a high level of social intelligence, as evidenced by an overall mean score of 3.76 ($SD=0.51$). This suggests that agents possess significant interpersonal competencies and cognitive awareness in navigating social environments, which are particularly vital in customer-facing occupations such as call center work (Cantor & Kihlstrom, 1987).

Table 3. *Descriptive statistics on the level of social intelligence of inbound call center agents in the IT-BPO Industry in Region XI*

Indicators	Mean	SD	Descriptive Rating
social information processing	3.83	0.63	high level of social information processing
social skills	3.71	0.62	high level of social skills
social awareness	3.73	0.57	high level of social awareness
Overall	3.76	0.51	high level of social intelligence

Among the three dimensions of social intelligence, social information processing received the highest mean score ($\bar{x}=3.83$, $SD=0.63$), reflecting respondents' adeptness at accurately interpreting social cues and discerning the intentions of others. This finding implies that inbound agents are proficient in reading between the lines during customer interactions, allowing them to respond appropriately even when communication is nuanced or emotionally charged. Such a skill is fundamental in maintaining professionalism and service quality in real-time voice-based support environments (Silvera, Martinussen, & Dahl, 2001).

Social awareness was rated next ($\bar{x}=3.73$, $SD=0.57$), indicating that participants are generally sensitive to social dynamics, norms, and the emotional states of others. This dimension represents the agents' situational attunement—a crucial factor in diffusing customer dissatisfaction and promoting empathic engagement. Meanwhile, social skills, although receiving the lowest mean

among the three ($\bar{x}=3.71$, $SD=0.62$), still falls within the high range. This implies that while call center agents are capable of initiating and maintaining positive social interactions, there may be room to strengthen competencies in relationship management and assertive communication—skills often required in conflict resolution and persuasive dialogue.

The overall high level of social intelligence among call center agents supports Glasser's (1998) postulate in Choice Theory, which posits that up to 80% of human happiness is contingent upon the quality of interpersonal relationships. The ability to navigate complex social landscapes is not only pivotal to maintaining positive workplace dynamics but also contributes directly to employee retention, psychological well-being, and customer satisfaction. This finding is consistent with the assertions of Joseph and Lakshmi (2010), who argued that social intelligence facilitates workplace harmony, enhances occupational fulfillment, and helps reduce interpersonal conflicts.

Furthermore, in the context of the IT-BPO industry—where employees often manage emotional labor and performance pressures—the presence of social intelligence may act as a buffer against burnout and disengagement. Socially intelligent employees are more likely to maintain collegial relationships, adapt to diverse interpersonal situations, and function effectively in multicultural service environments (Goleman, 2006). These findings affirm the value of investing in socio-emotional learning programs and soft skills training as integral components of organizational development strategies in the BPO sector.

3.3 Grit Among Inbound Call Center Agents in the IT-BPO Industry

As presented in Table 4, the level of grit among inbound call center agents in selected IT-BPO companies in Region XI was found to be high, as evidenced by an overall mean of $\bar{x}=3.87$ ($SD=0.51$). Since grit is operationalized in this study through the dimension of resilience, this result suggests that call center agents possess a strong tendency to persist through adversity, exhibit sustained effort over time, and maintain motivation despite workplace stressors and repetitive tasks.

Table 4. *descriptive statistics on the level of grit of inbound call center agents in the IT-BPO Industry in Region XI*

Indicator	Mean	SD	Descriptive Rating
resilience	3.87	0.51	high level of grit
Overall	3.87	0.51	high level of grit

The construct of resilience as an expression of grit supports Duckworth et al.'s (2007) conceptualization of grit as the combination of passion and perseverance toward long-term goals. In a high-pressure environment like the BPO industry—characterized by demanding performance metrics, customer confrontation, and routine shift work—resilience plays a vital role in preventing burnout and promoting psychological durability (Maddi, 2006). The high mean score indicates that call center agents do not easily give up when faced with difficulties, instead showing a notable ability to rebound from setbacks, maintain composure, and stay focused on their professional responsibilities.

Moreover, the interpretation of resilience as a learnable and developable attribute rather than an innate personality trait further enriches the findings. As Malik (2013) emphasized, resilience involves adaptive cognitive-behavioral responses that are shaped by individual experiences, cultural environment, and organizational support systems. The implication of this in the current context is profound—while many agents already display a commendable level of grit, targeted interventions such as resilience-building workshops, mentoring programs, and wellness initiatives may further strengthen this capacity across the workforce.

The results also provide a counter-narrative to the widespread perception of high attrition and emotional exhaustion in the BPO sector. Although turnover is an ongoing challenge, this study demonstrates that, at least at the initial stages of employment, agents report strong perseverance and coping strategies. If nurtured through consistent organizational support and positive work

culture, these qualities could serve as protective factors against emotional fatigue and performance deterioration.

3.4 Work Behavior Among Inbound Call Center Agents in the IT-BPO Industry

As shown in Table 5, the overall mean score for work behavior among inbound call center agents in Region XI was 3.97 (SD=0.52), indicating a high level of work behavior across the sampled population. Among the sub-indicators, task behavior and contextual behavior both yielded the highest mean scores of $\bar{x}=3.98$, followed closely by productive behavior with $\bar{x}=3.94$, all of which were interpreted as high. These findings suggest that employees in this sector demonstrate a consistent commitment to job duties, positive engagement beyond formal role expectations, and a sustained focus on contributing to overall organizational performance.

Table 5. *Descriptive statistics on the level of work behavior of inbound call center agents in the IT-BPO Industry in Region XI*

Indicator	Mean	SD	Descriptive Rating
task behavior	3.98	0.65	high level of task behavior
contextual behavior	3.98	0.54	high level of contextual behavior
productive behavior	3.94	0.61	high level of productive behavior
Overall Mean	3.97	0.52	high level of work behavior

The elevated score for task behavior reflects the agents' competence in executing job-specific responsibilities with accuracy, timeliness, and attentiveness, aligning with the assertion of Kappagoda (2018) that task behavior refers to actions directly related to fulfilling organizational objectives and operational duties. In a call center environment, this typically includes meeting service-level agreements, handling client inquiries with efficiency, and maintaining adherence to call quality protocols. The equally high level of contextual behavior further reinforces that agents are likely to exhibit cooperative, proactive, and citizenship-like behaviors such as assisting coworkers, adhering to organizational norms, and contributing to a positive work climate—essential traits in high-volume, high-stress work environments like IT-BPO firms.

Productive behavior, though slightly lower than the other dimensions, still scored highly ($\bar{x}=3.94$), suggesting that employees maintain work outputs aligned with expectations. This supports the broader interpretation of productive behavior as a function not only of technical performance but also of sustained motivation, time management, and self-discipline (Borman & Motowidlo, 1997). These behavioral domains, when combined, form a cohesive portrait of an effective employee workforce—one that is technically competent, socially attuned, and organizationally committed.

3.5 Correlational Analysis Between Emotional Intelligence, Social Intelligence, Grit, and Work Behavior

The correlational analysis revealed statistically significant positive associations between the three independent variables—emotional intelligence, social intelligence, and grit—and the dependent variable, work behavior, among inbound call center agents in the IT-BPO industry in Davao Region (see Table 6). This finding indicates that higher levels of these psychological attributes are associated with more favorable work behaviors in the workplace context.

Emotional intelligence demonstrated a strong and statistically significant positive relationship with work behavior. This suggests that agents who are more emotionally aware, better at regulating their emotions, and more capable of interpersonal interactions are more likely to exhibit desirable work behaviors. These results are consistent with the findings of Morrison (2017), who emphasized that emotional intelligence plays a critical role in job behavior, particularly among professionals working in emotionally demanding contexts. Similarly, Higgs (2004) and Nel and De Villiers (2004) underscored that emotional intelligence, especially its self-management cluster, contributes significantly to performance outcomes in service-oriented environments such as call centers. Although Gryn (2010) questioned the statistical significance of this relationship in certain settings, more recent trends in organizational practice increasingly recognize emotional intelligence

Table 6. *Pearson correlations between emotional intelligence, social intelligence, grit, and work behavior (N = 400)*

Variable	1	2	3	4
1. Emotional Intelligence	—			
2. Social Intelligence	.694**	—		
3. Grit	.738**	.659**	—	
4. Work Behavior	.753**	.630**	.723**	—

Note. All correlations are Pearson product-moment correlation coefficients.
 $p < .01$ (2-tailed).

as a critical factor during recruitment and employee development initiatives (Chaudhry & Usman, 2011). The current findings reinforce this shift, supporting the argument by Hayashi and Ewert (2006) that greater emotional competence enhances professional performance.

Social intelligence also demonstrated a significant and moderately strong relationship with work behavior. This finding aligns with prior research suggesting that individuals who are adept in social information processing, social awareness, and interpersonal skills are more likely to collaborate effectively and adjust to workplace dynamics (Joseph & Lakshmi, 2010; Klein, DeRouin & Salas, 2006). Socially intelligent employees are often better at understanding the nuances of social interactions, enabling them to respond appropriately to team members and clients alike. This is particularly important in call center environments where successful customer engagement hinges on real-time interpersonal navigation. Research by Meijs et al. (2010) and Palucka et al. (2011) further supports the premise that social intelligence fosters prosocial behavior, emotional resilience, and social adaptability, all of which are critical components of work behavior in service industries.

Finally, grit was found to have a strong and statistically significant positive correlation with work behavior. This suggests that individuals who demonstrate sustained perseverance and passion toward long-term goals are also likely to exhibit consistent, productive, and adaptive work behaviors. These results mirror the findings of Levy and Steele (2011), who posited that gritty individuals are more likely to persist through setbacks and maintain goal-directed effort over time. In the high-pressure setting of the IT-BPO industry, where employees routinely manage complex tasks and emotionally taxing customer interactions, grit emerges as a vital psychological resource. Employees with higher grit levels may be better positioned to handle demanding workloads and maintain optimal job performance despite adversity.

Overall, the correlation results substantiate the hypothesized relationships, confirming that emotional intelligence, social intelligence, and grit are significantly and positively associated with work behavior. As all p-values were below the conventional alpha threshold of .05, the null hypotheses for all three relationships were rejected. These findings collectively suggest that cultivating emotional regulation, social adeptness, and perseverance may be instrumental in enhancing the work behavior of call center agents in Davao Region.

3.6 Influence of Emotional Intelligence, Social Intelligence, and Grit on Work Behavior

To explore the predictive power of emotional intelligence, social intelligence, and grit on work behavior among inbound call center agents, a stepwise multiple regression analysis was conducted. Two models were generated. Model 1 included grit as the sole predictor, while Model 2 included both grit and emotional intelligence as significant predictors.

In Model 1, grit alone explained 59.4% of the variance in work behavior ($R^2 = .594$), which is a substantial explanatory power for a single predictor (Hair et al., 2006). The unstandardized coefficient for grit was $B = 0.785$, and the standardized beta was $\beta = .770$, indicating that higher levels of grit significantly and positively predicted better work behavior, $t(398) = 24.11$, $p < .001$. This result aligns with Duckworth et al. (2007), who posited that grit—defined as perseverance and passion for long-term goals—plays a critical role in sustaining high performance over time.

Table 7. Stepwise Multiple Regression Coefficients Predicting Work Behavior

Model	Predictor	B	SE	β	<i>t</i>	<i>p</i>
1	(Constant)	0.931	0.127	—	7.32	< .001
	Grit	0.785	0.033	.770	24.11	< .001
2	(Constant)	0.109	0.135	—	0.806	.421
	Grit	0.532	0.037	.522	14.44	< .001
	Emotional Intelligence	0.466	0.043	.394	10.87	< .001

Note. Dependent Variable: Work Behavior. Model 2 includes both grit and emotional intelligence. Social intelligence was not retained.

Model 2 added emotional intelligence as a second predictor. This expanded model accounted for 68.5% of the variance in work behavior ($R^2 = .685$), an increase of 9.1 percentage points compared to Model 1. Both grit ($\beta = .522$, $p < .001$) and emotional intelligence ($\beta = .394$, $p < .001$) remained statistically significant predictors. This finding underscores that, in addition to perseverance, the ability to perceive, regulate, and manage emotions contributes meaningfully to productive workplace behavior (Akintayo & Babalola, 2012).

Notably, social intelligence did not enter either model, suggesting its predictive power was not statistically significant in the presence of the other variables. This result diverges from earlier research (e.g., Joseph & Lakshmi, 2010; Meijs et al., 2010), indicating that in fast-paced, performance-focused environments like call centers, emotional regulation and grit may outweigh social perceptiveness in driving behavior.

Also, as seen in Table 8, the Durbin–Watson statistic was 1.798, within the acceptable range (1.5–2.5), indicating no severe autocorrelation among residuals (Gujarati, 1995; Neter et al., 1990).

Table 8. Model Summary of the Regression Analysis

Model	<i>R</i>	R^2	Adjusted R^2	SE of Estimate	ΔR^2	<i>F</i> Change	<i>df1</i>	<i>df2</i>	<i>p</i>	Durbin–Watson
1	.770	.594	.593	0.33308	—	—	—	—	—	—
2	.829	.685	.685	0.29271	.091	118.36	1	397	< .001	1.798

4. CONCLUSION

Based on the findings of this study, it can be concluded that inbound call center agents in Davao Region exhibit high levels of emotional intelligence, social intelligence, and grit. The elevated emotional intelligence scores suggest that these employees possess a strong capacity to regulate their emotions, remain self-aware, and effectively influence the interpersonal dynamics in their workplace. Despite the stress commonly associated with call center work, these individuals appear to focus on factors that contribute to their emotional well-being, thereby sustaining their productivity.

In addition, the agents demonstrated high levels of social intelligence, indicating their ability to interpret social cues, empathize with colleagues, and collaborate effectively within team-based environments. This capacity for interpersonal understanding likely facilitates smoother workplace communication and group cohesion. Furthermore, the results revealed that the agents also possess high grit, which reflects their perseverance, resilience, and sustained effort in the face of occupational challenges. Their high grit scores underscore a commitment to long-term goals and an unwillingness to surrender to setbacks—attributes crucial in high-pressure, task-driven work settings.

Correlation analysis showed that emotional intelligence, social intelligence, and grit are each significantly and positively associated with work behavior. This implies that improvements in any of these psychological traits are likely to enhance productive workplace behavior. However, the stepwise regression analysis further clarified that among the three predictors, only emotional intelligence and grit significantly influence work behavior. Grit emerged as the strongest predictor, suggesting that

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the perseverance and passion embodied in this trait are more critical than social perceptiveness in driving consistent, effective behavior among call center agents.

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