Ethical Leadership, Flourishing, and Extra-Role Behavior Among Nurses

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Abstract
Introduction: The nursing literature is silent about the relationship between ethical leadership, nurses’ flourishing, and extra-role behavior. This study was carried out to contribute to the relevant field research.

Objective: The aim of the present study was to investigate the relationship between nurses’ perceptions of their nursing managers’ ethical leadership behavior, nurses’ flourishing, and their extra-role behavior.

Methods: This was a cross-sectional study involving 302 nurses from six hospitals in Damietta City, Egypt. Data were collected using the following three self-report scales: Ethical Leadership at Work questionnaire, Flourishing Scale, and extra-role behavior scale. The data were analyzed using descriptive statistical, Pearson correlation, regression analysis and the structure equation model.

Results: There was a significant positive relationship between nursing managers’ ethical leadership, nurses’ flourishing, and extra-role behavior. The regression analysis showed that the ethical leadership of nursing managers and nurses’ flourishing predict extra-role behavior.

Conclusion: Nurses with a high level of flourishing and who work with a manager exhibiting ethical leadership behavior are more likely to activate extra-role behavior. Hence, it is recommended that nursing managers embrace an ethical approach in their leadership practices and promote flourishing among nurses to encourage them to go the extra mile in their jobs.

Keywords
ethical leadership, flourishing, extra-role behavior, nurses

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Introduction
Nursing leadership has a uniquely important role in shaping the conduct and practices of nurses (Rokstad et al., 2015). It is the key element in the development and progress of nursing and in enhancing the quality of healthcare services rendered to patients (Hardy et al., 2020). One of the most distinctive forms of nursing leadership is ethical leadership, which lies at the heart of nursing (Daly et al., 2004) and enhances nurses’ performance (Lotti et al., 2018).

Ethical leadership has been linked to favorable outcomes for nurses and healthcare organizations. Nurses who work for ethical leaders are committed, empowered, and do their best for their healthcare organizations (Barkhordari-Sharifabad et al., 2018). They are more likely to have a sense of trust and well-being (Chughtai et al., 2015). Followers can thrive and flourish under ethical leaders (Sims, 2017).

Flourishing is the most prominent multidimensional concept in the field of well-being. It means the experience of life going well. Flourishing is a combination of feeling good (hedonic well-being) and functioning effectively (eudemonic well-being) (Huppert & So, 2013). Recently, scholars have shown an increase interest in studying nurses’ flourishing in their workplace to gain a deeper understanding of the antecedents and outcomes of nurses flourishing (Agenor et al., 2017).

Nurses bring a unique perspective to healthcare organizations. They remain close to patients and their relatives, which enabling them to understand their pain and distress (Goodman, 2012). In fact, the nature of such work required from nurses includes offering emotional support, providing
reassurance, and promoting a sense of calm to patients and their family members. These behaviors are usually voluntary and do not constitute a part of formal job descriptions; as such, these behaviors are referred to as “extra-role behaviors” (Malik & Dhar, 2017). This study tries to identify the relationship between ethical leadership behavior, nurses’ flourishing and extra-role behavior.

**Review of Literature**

Ethical leadership can be defined as “the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement, and decision making” (Brown et al., 2005, p. 120). Ethical leaders are characterized by fairness, honesty, humanity, respect for others, encouraging initiatives, a focus on team building, value-driven decision making, valuing awareness, leading by example, and not tolerating ethical violations (Sims, 2017).

Nurses forming the largest group of professionals in the healthcare team who communicate extensively with patients (Zangeneh et al., 2019). They are considered the backbone of the healthcare system, and their performance determine to a great extent the quality of services provided to patients. Therefore, it is important for nurses to have a great sense of well-being and flourishing in the face of recent challenges and difficulties (Al Hamdan & Bani Issa, 2021).

Flourishing has been conceptualized as the optimal state of mental health (Keyes, 2007). Diener et al. (2010) identified the following eight features of flourishing: purpose and meaning, positive relationships, social contribution, engagement, self-respect, competence, social relationships, and optimism. Nurses’ flourishing is a positive state at work that may give power to nurses to be more productive and exhibit extra-role behaviors by their own choice (Demerouti et al., 2015).

Extra-role behaviors can be defined as a set of behaviors that go beyond the descriptions of the formal work role and do not form a part of the formal reward system (Ramos et al., 2018). These behaviors denote nurses’ willingness to be helpful, non-compulsive and supportive to others in healthcare settings (Malik & Dhar, 2017). Extra-role behaviors of nurses are not limited to efforts directed to patients, but also include mentoring and guiding juniors, sharing knowledge with colleagues, avoiding unnecessary conflict, positive word-of-mouth outside the hospital, trying to improve workplace ethics, creating ways to achieve the hospital functions (Bahrami et al., 2016).

Nurses’ extra-role behaviors are valuable contributions to hospitals that affect service evaluation and the long-term development of hospitals. Through those behaviors, hospitals could exceed patients’ minimum expectations and achieve care quality excellence (Zhang et al., 2019). Also, such behaviors by nurses could promote positive experiences, facilitate achievement of the hospital mission, and encourage relationships among nurses and between nurses and patients (Salanova et al., 2011). So, nurse managers should develop ways to inspire extra-role behaviors among nurses. Notably, those behaviors are ethically important as nursing is a profession grounded on ethical practice (Gallagher & Tschudin, 2010) and extra-role behaviors are considered a moral philosophy with a core value considering patients’ preferences, needs and wants (Zhang et al., 2019).

In the nursing field, ethical leadership leads to positive outcomes for patients, nurses, and nursing leaders as well as progress and development of the nursing profession. Although ethical leadership carries outstanding importance (Barkhordari-Sharifabad et al., 2018) in the field, there is a dearth of nursing research focusing on ethical leadership and its potential outcomes (Makaroff et al., 2014). Moreover, the limited number of nursing research studies have focused on the examination of the effect of ethical leadership on ethical climate (Aloustani et al., 2020), nurses’ job satisfaction (Özden et al., 2019), and nurses’ commitment to the organization (Lotfi et al., 2018). Nevertheless, to the best of our knowledge, the link between ethical leadership and nurses’ flourishing has not been previously examined. In fact, the science of flourishing remains in its infancy, and it is virtually absent in the nursing literature (Agenor et al., 2017). There is a large gap in knowledge about the factors that enhance nurses’ flourishing, and future research is needed to discover the antecedents of flourishing (Schotanus-Dijkstra et al., 2016).

Moreover, whether ethical leadership promotes positive nurse behavior is still a confusing question (Mastracci, 2017). More specially, the link between ethical leadership and the extra-role behaviors of nurses remains under investigation (Cheng et al., 2014). In addition, there is a lack of knowledge with regard to the relationship between flourishing and extra-role behavior (Demerouti et al., 2015). Given these gaps in the literature, this study aims to investigate the relationship between nurses’ perceptions of the ethical leadership behavior of their nursing managers and nurses’ flourishing and extra-role behavior.

**Development of the Hypotheses**

This study builds on self-determination theory, which proposes that the wellness of employees is promoted when those employees feel supported by their leaders, through acknowledging their viewpoints, offering choices about how to enact their ideas, and avoiding pressuring behavior and language (Deci et al., 2017). Such behaviors are introduced by ethical leaders, who have a moral obligation to grant employee work autonomy and self-direction (Kalshoven et al., 2011). In addition, qualitative, interview-based research argues that the ethical practices of leaders contribute to nurses’ job satisfaction, enhance productivity, and promote personal welfare (Barkhordari-Sharifabad et al., 2018). Ethical leaders are characterized by fairness, honesty, humanity, respect for others, encouraging initiatives, a focus on team building, value-driven decision making, valuing awareness, leading by example, and not tolerating ethical violations (Sims, 2017). Ethical leaders are characterized by fairness, honesty, humanity, respect for others, encouraging initiatives, a focus on team building, value-driven decision making, valuing awareness, leading by example, and not tolerating ethical violations (Sims, 2017). Ethical leaders are characterized by fairness, honesty, humanity, respect for others, encouraging initiatives, a focus on team building, value-driven decision making, valuing awareness, leading by example, and not tolerating ethical violations (Sims, 2017). Ethical leaders are characterized by fairness, honesty, humanity, respect for others, encouraging initiatives, a focus on team building, value-driven decision making, valuing awareness, leading by example, and not tolerating ethical violations (Sims, 2017). Ethical leaders are characterized by fairness, honesty, humanity, respect for others, encouraging initiatives, a focus on team building, value-driven decision making, valuing awareness, leading by example, and not tolerating ethical violations (Sims, 2017). Ethical leaders are characterized by fairness, honesty, humanity, respect for others, encouraging initiatives, a focus on team building, value-driven decision making, valuing awareness, leading by example, and not tolerating ethical violations (Sims, 2017).
et al., 2018). Based on these previous arguments, the following hypothesis was proposed:

H1: Nurses’ perceptions of the ethical leadership behavior of their nursing managers is positively related to nurses’ flourishing.

Social exchange theory contends that when individuals perceive that someone has been good to them, they will feel obligated to reciprocate with positive behaviors (Blau, 1964). Ethical leaders demonstrate honesty, trustworthiness, and integrity. They increase their subordinates’ perceptions of organizational justice. Ethical leaders also support and care about them (Brown et al., 2005). Employees, in turn, reciprocate by putting forth extra effort into their work and showing proactive helpful behavior to others (Mostafa & El-Motalib, 2020). Accordingly, the following hypothesis was proposed:

H2: Nurses’ perceptions of the ethical leadership behavior of their nursing managers is positively related to the nurses’ extra-role behavior.

From the perspective of Fredrickson’s broaden-and-build theory, positive emotions are crucial elements of functioning effectively (Fredrickson, 2001). An empirical research study carried out by Neves et al. (2018) demonstrated that greater emotional exhaustion leaves employees in a depleted state, wherein they lack the physical and psychological resources needed to perform well, leading to lower extra-role performance of employees. Similarly, Demerouti et al. (2015) indicated that flourishing employees can exhibit behavior that is not formally required by their job. Hence, the following hypothesis was proposed:

H3: Nurses’ flourishing is positively related to the extra-role behavior of nurses.

Given the above three main hypotheses, the research conceptual model is presented as follows (Figure 1):

![Figure 1. Proposed conceptual model of research.](image)

Subjects and Methods

Study Design

This study had a cross-sectional, descriptive research design.

Settings

The study was carried out in all hospitals affiliated with the Ministry of Health in Damietta City, Egypt (N = 6 hospitals).

Participants

The study population was composed of staff nurses employed in the six participating hospitals. All participants met the following inclusion criteria: (a) licensed staff nurses, (b) have at least 6 months of work experience in the same unit in which they were currently working and (c) agreed to partake in the study. The nurses were excluded from the study if they were nursing interns or temporarily on leave throughout the data collection period.

Based on the population proportion formula, \( n = Np(1-p)/(N-1 \times (d^2/z^2) + p(1-p)) \) (Thompson, 2012), the minimum required sample size (n) was 291 participants from a total (N) of 1200 eligible nurses, with the following assumptions: P (estimated proportion of nurses’ perception of ethical leadership) = 50%, d (error proportion) = 0.05, and Z (critical value for normal distribution at 95% confidence level) = 1.96. Considering the attrition rate of participants, 323 questionnaires (10% more than calculated) were distributed. Nurses were selected from the six participating hospitals using the systematic random sampling method. Fourteen participants did not return the questionnaires, and seven questionnaires were eliminated because of insufficient responses. Ultimately, 302 questionnaires entered the statistical analysis process, for a 93.5% response rate.

Measures

This study used three well-established scales in the English language. The guide proposed by Brislin (1970) was used for the scales translation process. The scales were translated from English into Arabic by a university professor of nursing administration who was proficient in both languages and aware of the health care and leadership concepts. Then the scales were back-translated to English by a certified translator who was familiar with idioms and had no nursing or clinical background. The forward and back-translations were performed using the double-blind principle. The authors compared the translated and back-translated versions with the English scales to draft an initial version. A committee of five experts, three nursing educators and two nurses from clinical practice, were asked to evaluate the relevance and clarity of each item for measuring the construct. Minor
The main outcome in this study was extra-role behavior. The extra-role behavior of the nurses was measured using an eight-item scale developed by Eisenberger et al. (2010). A sample item is, “I encourage coworkers to try new and more effective ways of doing their job.” Items were scored on a 5-point Likert scale, ranging from 1 = strongly disagree to 5 = strongly agree. The higher the score, the higher the nurses’ extra-role behavior. The Cronbach’s alpha for this scale was 0.936.

Ethical leadership was measured by The Ethical Leadership at Work questionnaire (ELW; Kalshoven et al., 2011). This scale was used to examine the nurses’ perceptions of the ethical leadership behavior of their nursing managers. The scale is composed of 38 items that are classified into the following seven subdimensions: fairness (6 items), integrity (4 items), ethical guidance (7 items), people orientation (7 items), power sharing (6 items), role clarification (5 items), and concern for sustainability (3 items). Seven negatively worded items were reverse coded. Sample items are as follows: “Pursues his/her own success at the expense of others” (reverse coded), “Clearly explains integrity-related codes of conduct,” and “Allows subordinates to influence critical decisions.” A 5-point Likert scale, ranging from 1 = strongly disagree to 5 = strongly agree, was used. Higher scores indicate higher levels of nurses’ perceptions of the ethical leadership behavior of their nurse managers. The Cronbach’s alpha for this scale was 0.966.

Nurses’ flourishing was measured using the eight-item Flourishing Scale (FS; Diener et al., 2010). A sample item is, “I am engaged and interested in my daily activities.” Items were scored on a 7-point scale, ranging from 1 = strongly disagree to 7 = strongly agree. The high scores on this scale demonstrate the high levels of nurses’ flourishing. The Cronbach’s alpha for this scale was 0.965.

**Sample Characteristics.** Socio-demographic data form was attached to the other measuring scales that asked for the participant’s age, gender, marital status, educational background, years in the profession, and years of experience in the current unit.

**Pilot Study**

A pilot study was conducted on 30 nurses (not included in the study) to test the clarity and time taken to complete the questionnaire. Based on the recommendations of the participants, some modifications were made to the questionnaires. In the pilot study, the Cronbach’s alpha was 0.958 for the ELW questionnaire, 0.918 for the FS, and 0.956 for the extra-role behavior scale.

**Data Collection**

Data were collected from staff nurses using an anonymous self-administered questionnaire from June to August 2020. Permission was obtained from hospital management to distribute questionnaires after they received an explanation of the aim and significance of the study. Subsequently, the sampling frame was prepared from the lists of nurses from each hospital (only nurses who met the inclusion criteria was included). The participants were selected systematically based on this sampling frame. The researchers handed out the questionnaires along with an unsealed envelope to each eligible nurse during their duty hours on the three shifts. Participants were informed about the purpose of the study and that their participation was voluntary. They were instructed to keep in mind first-line nurse managers when filling out the questionnaires. The first-line nurse managers were chosen to be evaluated as they considered the immediate supervisors of nurses which had direct authority on nurses and handle day-to-day unit managerial issues in the studied hospitals. Finally, the researchers personally collected the completed questionnaires from each participant in sealed envelopes within two weeks from questionnaires distribution. Study participants completed the survey in 15 to 20 min.

**Ethical Considerations**

Research Ethics Committee of Faculty of Nursing, Port Said University approved the study. Informed consent was obtained from the nurses after they received an explanation of the aim of the study. Nurses included in the study were assured of the confidentiality of the information gathered and that they had the right to withdraw or refuse participation at any time without penalty.

**Statistical Analysis**

Collected data were analyzed using SPSS version 24 (IBM Corporation, Chicago, IL, USA) and IBM AMOS V.25.0. Means, standard deviations, and percentages were used to quantify and describe the data. Cronbach’s α was applied to assess the internal consistency of the scales used in this study. Differences in ethical leadership, flourishing, and extra-role behavior according to demographic characteristics were analyzed using independent-sample t test and one way analysis of variance (ANOVA). To identify correlations between the key study variables, Pearson r correlation coefficient was used. Variables that yielded a significance in difference tests and correlation analysis were subject to hierarchical multiple regression analyses. Before conducting the regression model, the lack of multicollinearity was confirmed. A structural equation model was used to examined the overall fitness of primary model using goodness-of-fit indexes (chi-square/degree-of-freedom ratio [χ²/df] < 5, root mean square error of approximation [RMSEA] < 0.1,
comparative fit index (CFI) > 0.90, and Tucker–Lewis Index (TLI) > 0.90; Du, 2013).

**Results**

**Demographic Characteristics and Differences in Ethical Leadership, Flourishing, and Extra-Role Behavior**

Table 1 presents the demographic profile of participants and its differences in study variables. Most study participants were female (80.8%), and 58.6% were married. Fewer than half of participants were between 35 and 45 years old (40.1%), had a diploma degree in nursing education (44.4%), had 10–20 years of work experience in the nursing profession (42.1%), and had less than 10 years of work experience in the current unit (44.0%). The results of the correlation analysis, nurses' perceptions of the ethical leadership behavior of their nursing managers was interpreted as above average nurses' extra-role behavior. The mean of flourishing was 4.45 ± 1.510 (on a scale ranging from 1–7), which was interpreted as above average nurses' flourishing. According to the results of the correlation analysis, nurses' perceptions of the ethical leadership behavior of their nursing managers was positively and significantly related to nurses' flourishing (r = 0.336, P < 0.01) and extra-role behavior (r = 0.478, P < 0.01). In addition, nurses' flourishing was found to have a positive relationship with their extra-role behavior (r = 0.557, P < 0.01).

**Descriptive Statistics and Correlations**

Table 2 displays the means, standard deviations, and correlations of the variables. In this study, the mean of the ethical leadership was 3.24 ± 0.739, and the mean of extra-role behavior was 3.39 ± 0.873 (on a scale ranging from 1–5), which was interpreted as moderate nurses’ perception of nursing managers ethical leadership behavior and moderate nurses’ extra-role behavior. The mean of flourishing was 4.45 ± 1.510 (on a scale ranging from 1–7), which was interpreted as above average nurses’ flourishing. According to the results of the correlation analysis, nurses’ perceptions of the ethical leadership behavior of their nursing managers was positively and significantly related to nurses’ flourishing (r = 0.336, P < 0.01) and extra-role behavior (r = 0.478, P < 0.01). In addition, nurses’ flourishing was found to have a positive relationship with their extra-role behavior (r = 0.557, P < 0.01).

**Regression Analysis**

To confirm the relationship between ethical leadership and nurses’ flourishing, a simple regression analysis was calculated as the ethical leadership was the independent variable and nurses’ flourishing was the dependent variable (Table 3). Demographic characteristics (age, gender, marital status, educational background, years in the profession, and years of experience in the current unit) were not entered into the regression equation, because there was no difference in the dependent variable (nurses’ flourishing; Table 1). The regression analysis showed that nurses’ perceptions of the ethical leadership behavior of their nursing managers could predict nurses’ flourishing (β = 0.34, P < 0.01) and explained 11.3% of the variance in nurses’ flourishing.

To determine the relationship between ethical leadership and nurses’ flourishing and extra-role behavior, a hierarchical multiple regression analysis was computed (Table 4). Demographic characteristics (age, gender, marital status, educational background, years in the profession, and years of experience in the current unit) were not entered into the multiple regression equation, because there was no difference in the dependent variable (extra-role behavior; Table 1). It was confirmed that the tolerance was 1.0–0.87 (>0.1) and the variance inflation factor (VIF) was 1.0–1.128 (<3), which showed no multicollinearity.

In model 1, the ethical leadership was the independent variable and extra-role behavior was the dependent variable. The regression results identified that nurses’ perceptions of the ethical leadership behavior of their nursing managers could predict the extra-role behavior of nurses (β = 0.478, P < 0.01) and explained 22.9% of the variance in nurses’ extra-role behavior. In model 2, ethical leadership and nurses’ flourishing were the independent variable and extra-role behavior was the dependent variable. The regression analysis results showed that both ethical leadership and nurses’ flourishing could predict nurses’ extra-role behavior (β = 0.328, 0.446, P < 0.01) and explained 40.5% of the variance in nurses’ extra-role behavior.

**Structural Equation Modeling**

The results of structural equation modeling revealed that the model fit by the data (χ²/df = 3.48, CFI = 0.92, TLI = 91, RMSEA = 0.09). This means that the collected data provide adequate support for the conceptual model that nurses’ perceptions of the ethical leadership behavior of their nursing managers had a positive effect on nurses’ flourishing and extra-role behavior (Table 5; Figure 2)

**Discussion**

The aim of this study was to investigate the relationship between nurses’ perceptions of the ethical leadership behavior of their nursing managers, nurses’ flourishing, and their extra-role behavior. Overall, nurses perceived their managers as ethically moderate in the research hospitals. This result is in line with the findings of Freire and Bettencourt (2020) and Barkhordari-Sharifabad and Mirjalili (2020) studies, but a high level of ethical leadership has been reported in some studies (Lotfi et al., 2018; McKenna & Jeske, 2021). The inconsistency between this study and other studies can be explained by differences in studied units, tools used, and the cultural and research environment.

This is a critical finding, because the nursing profession is based on ethics and morality, and nursing managers should demonstrate a high level of ethical practices (Gallagher &
Tschudin, 2010). Ethical leadership leads to positive and effective outcomes for both patients and nurses. Moreover, it contributes greatly toward fostering progress and development in the nursing profession (Barkhordari-Sharifabad et al., 2018). However, nursing managers may be more focused on the quality of care and less focused on the morale and work satisfaction of their staff members (Zhang et al., 2019). Thus, continuous training is required for nursing managers to learn and apply ethical leadership skills.

Furthermore, participating nurses perceived themselves as having above average levels of flourishing. Because of the absence of similar studies on nurses, comparing this result to previous studies was not possible. Nevertheless, this is an unexpected finding because of the impact of the COVID-19 outbreak on healthcare professionals during the time of data collection. One possible explanation is that nurses may feel well supported from family and community about their working conditions, which in turn made them less likely to develop adverse mental health outcomes and encouraged them to work well; receiving support and recognition is thought to be a major driver of well-being and important for avoiding burnout (Gauche et al., 2017). It is also possible that nurses may have felt a deeper sense of personal achievement, which has an important role in enabling nurses to perform well mentally and at work; flourishing occurs when individuals connect to intentional and meaningful practices (Ververda & Hauge, 2019).

The results showed that the level of extra-role behavior of participating nurses was at a moderate level. Salanova et al. (2011) and Bahrami et al. (2016) also showed an average level of extra-role behavior among nurses, but Zhang et al. (2019) concluded that extra-role behavior was high among

Table 1. Demographic Characteristics and Differences in Ethical Leadership, Flourishing, and Extra-Role Behavior (N = 302).

| Variable                      | No. (%) | Ethical leadership | Flourishing | Extra-role behavior |
|-------------------------------|---------|--------------------|-------------|---------------------|
|                               |         | M ± SD             | M ± SD      | M ± SD              |
|                               |         | t/F (P)            | t/F (P)     | t/F (P)             |
| Age (years) a                 |         |                    |             |                     |
| <25                           | 17 (5.6)| 2.93 ± 0.89        | 3.95 ± 1.11| 3.14 ± 0.69        |
| 25–34                         | 115 (38.1)| 3.35 ± 0.71        | 4.66 ± 1.48| 3.54 ± 0.82        |
| 35–45                         | 121 (40.1)| 3.19 ± 0.71        | 4.55 ± 1.48| 3.33 ± 0.93        |
| >45                           | 49 (16.2)| 3.17 ± 0.74        | 4.35 ± 1.74| 3.27 ± 0.88        |
| Gender b                      |         |                    |             |                     |
| Male                          | 58 (19.2)| 3.29 ± 0.79        | 4.63 ± 1.68| 3.46 ± 1.02        |
| Female                        | 244 (80.8)| 3.22 ± 0.73        | 4.41 ± 1.47| 3.37 ± 0.84        |
| Marital status c              |         |                    |             |                     |
| Single                        | 106 (35.1)| 3.16 ± 0.73        | 4.50 ± 1.55| 3.31 ± 0.92        |
| Married                       | 177 (58.6)| 3.31 ± 0.74        | 4.48 ± 1.47| 3.44 ± 0.85        |
| Divorced                      | 12 (4.0)| 2.86 ± 0.69        | 3.95 ± 1.61| 3.33 ± 1.07        |
| Widowed                       | 7 (2.3)| 3.24 ± 0.87        | 3.92 ± 1.70| 3.19 ± 0.79        |
| Education d                   |         |                    |             |                     |
| Diploma                       | 134 (44.4)| 3.20 ± 0.81        | 4.49 ± 1.47| 3.39 ± 0.93        |
| Technical                     | 79 (26.2)| 3.29 ± 0.72        | 4.21 ± 1.48| 3.38 ± 0.85        |
| Bachelor                      | 72 (23.8)| 3.31 ± 0.63        | 4.57 ± 1.58| 3.45 ± 0.76        |
| Master                        | 16 (5.3)| 2.96 ± 0.64        | 4.66 ± 1.71| 3.19 ± 1.00        |
| Doctorate                     | 1 (0.3)| 3.01               | 5.38        | 3.13               |
| Years in nursing e            |         |                    |             |                     |
| <10                           | 105 (34.7)| 3.24 ± 0.76        | 4.37 ± 1.39| 3.44 ± 0.80        |
| 10–20                         | 127 (42.1)| 3.23 ± 0.74        | 4.56 ± 1.54| 3.34 ± 0.92        |
| >20                           | 70 (23.2)| 3.25 ± 0.72        | 4.38 ± 1.63| 3.41 ± 0.89        |
| Years in the current unit f   |         |                    |             |                     |
| ≤10                           | 216 (71.3)| 3.26 ± 0.73        | 4.47 ± 1.52| 3.43 ± 0.89        |
| >10                           | 87 (28.7)| 3.19 ± 0.76        | 4.40 ± 1.50| 3.29 ± 0.83        |

aOne way ANOVA;
b t test for independent group.

Table 2. Descriptive Statistics and Correlation Analysis (N = 302).

| Variable           | Mean ± SD | 1    | 2    | 3    |
|--------------------|-----------|------|------|------|
| Ethical leadership | 3.24 ± 0.739 | 1    | 0.336** | 0.478** |
| Flourishing        | 4.45 ± 1.510 | 0.336** | 1    | 0.557** |
| Extra-role behavior| 3.39 ± 0.873 | 0.478** | 0.557** | 1    |

**p < 0.01.
most participants. Nursing is a noble profession because of the care and emotional support nurses convey to patients and their family members. Nurses act as communicators, advocates, educators, and caregivers to improve patient health (Sharma et al., 2016). Such activities could help patients and their family members feel much better (Malik & Dhar, 2017). Thus, nursing managers should develop ways to make nurses more willing to go the extra mile.

The study results indicated no differences in nurses’ perceptions of the ethical leadership behavior of their nursing managers according to age, gender, marital status, educational background, years in the profession, and years of experience in the current unit. These results showed that these factors are not related to nurses’ perceptions of the ethical leadership behavior of their nursing managers. Barkhordari-Sharifabad and Mirjalili (2020) and Lotfi et al. (2018) also confirmed these results. Inconsistent with these results, Özden et al. (2019) reported that nurses’ perceptions of ethical leadership behavior are influenced by age, gender, education and service time.

The results of this study revealed a significant positive relationship between nurses’ perceptions of the ethical leadership behavior of their nursing managers and nurses’ flourishing (confirmed H1). These results are consistent with existing studies, which have shown that ethical leadership in hospitals can greatly affect nurses’ well-being (Gillet et al., 2018; Kaffashpoor & Sadeghian, 2020). These results may be explained by the fact that ethical leaders display fairness and respect their staff, involve them in decision making, and clarify their role (Kalshoven et al., 2011), and under such behavior, nurses can flourish (Modic, 2016). These findings give hope to hospital managers that nurses’ flourishing can resume after the COVID-19 outbreak through the application of an ethical approach in leadership practices.

The results also confirm H2, that nurses’ perceptions of their nursing managers’ ethical leadership behavior is positively related to the nurses’ extra-role behavior. This result is an affirmation of previous research that showed that nurses who perceive ethical leadership show an increased level of helping behavior (Mastracci, 2017). Gagné and Deci (2005) also valued ethical leadership role in creating desirable changes in the nursing profession and assumed that the most desirable of all is extra-role behavior. These findings highlight the intriguing role of ethical leadership in predicting positive organizational behavior. Ethical leadership was considered as a practice that can have a powerful influence on the actions of others (Markey et al., 2020).

Support was found in the present study for a positive relationship between nurses’ flourishing and the extra-role behavior of nurses, which subsequently led to the confirmation of H3. These results agree with those of Demerouti et al. (2015), in The Netherlands, stating that flourishing employees are willing to invest in their work and to go the extra mile. In the same context, Bornstein et al. (2003) confirmed that the flourishing of employees is related to a host of positive outcomes. When employees experience well-being and positive emotions, they tend to be more cooperative and helpful.

The results of the regression analysis in this study revealed that nurses’ perceptions of the ethical leadership behavior of their nursing managers and nurses’ flourishing predicted the extra-role behavior of nurses. This results indicates that

| Table 3. Results of Simple Linear Regression Analysis Predicting Flourishing of the Studied Nurses (N = 302). |
|-----------------------------------------------|
| Independent variable | B | SE (B) | β  | t   | R2  | Adjusted R2 | F   |
|-----------------------|---|--------|----|-----|-----|------------|-----|
| Constant              | 2.23 | 0.37  | 6.05** |
| Flourishing           | 0.69 | 0.11  | 0.34 | 6.19** | 0.113 | 0.110 | 38.29** |

SE, standard error; β, standardized regression coefficient. **P < 0.01.

| Table 4. Results of Hierarchical Multiple Linear Regression Analysis Predicting Extra-Role Behavior of the Studied Nurses (N = 302). |
|-----------------------------------------------|
| Independent variable | Model 1 | | Model 2 | |
|-----------------------|---------|------|---------|------|
| Ethical leadership    | 0.56    | 0.06 | 0.478   | 9.44** |
| Flourishing           | 0.26    | 0.03 | 0.446   | 6.94 ** |
| F                     | 89.08** |      | 101.97** |
| R²                    | 0.229   |      | 0.405   |
| Adjusted R²           | 0.226   |      | 0.402   |
| Constant              | 1.56    |      | 0.99    |

SE, standard error; β, standardized regression coefficient. **P < 0.01.
nursing managers’ adherence to ethical leadership and the increased level of nurses’ flourishing are more likely to activate the extra-role behavior of nurses. This finding aligns with that of Yalden & McCormack (2010), which demonstrates that nurses’ flourishing can be achieved through ethical action and that this can transform to action in the workplace.

Limitations
The present study should be considered in the light of its limitations. The first limitation is that this study focused on only two outcomes of ethical leadership and one outcome of nurses’ flourishing. To shed light on other outcomes, such as creativity and work engagement, future research is thus warranted. Another limitation of this study is that the participants were from one city in Egypt and represent only one sector (i.e., the Ministry of Health), which can limit the generalizability of these findings. As a result, multicenter research in different healthcare sectors is suggested for further study.

Table 5. Model Fitness (N = 302).

| Value | χ² | df | χ²/df | CFI | TLI | RMSEA |
|-------|----|----|--------|-----|-----|-------|
| Conceptual model | 789 | 227 | 3.48 | 0.92 | 0.91 | 0.09 |

Implications for Practice
This research offers several potential practical implications for nursing managers. According to the findings, adherence to ethical leadership can prove fruitful for enhancing nurses’ flourishing and their extra-role behavior. Thus, it would be wise for hospitals to seek out and invest in ethical leadership practices. This can be done in several ways. For instance, one way would be to hire more ethical nursing managers by examining the applicants’ level of integrity and their ethical conduct. In addition, the behavior of nursing leaders can be monitored by leaving a complaint box so that nurses can anonymously write down their perception of unethical behaviors of nursing leaders. Third, training sessions could be organized for nursing leaders to help them cultivate ethical leadership behavior.

Furthermore, the results of this study point to the importance of flourishing among nurses in increasing their extra-role behavior. These findings can motivate hospital managers to induce and enhance the flourishing of nurses and can be accomplished by adapting several strategies. One way of doing this is by performing a periodic assessment of nurses’ flourishing levels and provides appropriate interventions. In addition, nurses can be encouraged to watch their colleagues for signs of psychological strain or fatigue and provide them with appropriate coaching and counseling. Programs, such as stress management workshops or counseling services, could be implemented to address these issues.
management, can also be offered to enhance the well-being of nurses.

**Theoretical Implications**

This study adds to the existing body of knowledge in several ways. First, the consequences of ethical nursing leadership to nurses and to hospitals were investigated. Second, this study is among the pioneer studies to explore the antecedents of nurses’ flourishing. Third, this study is unique in its scope and contributes to showing the vital role of nurses’ flourishing in strengthening the extra-role behavior of nurses. Fourth, the causes of extra-role behavior of nurses were identified.

**Conclusions**

The current study highlights the role of ethical leadership in enhancing nurses’ flourishing and increasing their level of extra-role behavior. The findings imply that nurses’ flourishing is a key factor in determining an increased level of extra-role behavior. Furthermore, the results showed that nursing managers’ adherence to ethical leadership increases the level of flourishing of nurses and could be a way to improve the extra-role behavior of nurses.

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