

Training Manager Identification of Social Network Centrality Characteristics for Employee
Development

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Training Development

Strategic Training

Goals of Strategic Training

When developing training, organizations often source information from various stakeholders to identify areas in need of improvement from consumer, managerial, and personal perspectives. When doing so, workforce analysts within organizations must consider how the training developed aligns with the organization's values and goals. In essence, training initiatives need to connect how organizational influence at the individual-level ultimately impact organizational-level performance through the affirmation of organizational values throughout processes, such as recruitment of diverse individuals and the provision of equitable resources. Strategic training reaffirms organizational goals through the development of new organizational initiatives aimed at obtaining the necessary knowledge and intellectual capital required to increase the probability of accomplishing organizational goals (Noe & Tew, 2008). To ensure that strategic training objectives are met, strategic learning may be incorporated. Tannenbaum (2002) identified learning imperatives for strategic learning composed of the diversification of an organization's learning portfolio through wider employee integration (e.g., acquiring competencies or policies to improve competitiveness or differentiation through integration and leveraging of the workforce's diverse perspectives); the tailoring of content that provides opportunities to apply what is learned for job-relevant interactions; and the creation and sustaining of an environment that promotes and facilitates knowledge usage. In combination, strategic training integrates strategic learning's imperatives and methodologies to ensure that

training initiatives develop employee skills necessary to perform well both on the individual- and organizational-levels.

One commonly held goal for many organizations is to remain competitive within their market, drawing attention to the need for organizations to use the limited resources on their workforce wisely. One way that organizations can ensure competitiveness within their market is to ensure that the benefits of diversity, such as flexible adaptation and problem solving through alternative perspectives and reduction of groupthink (Cox & Blake, 1991), are maximized. In other words, leveraging these perspectives that diverse individuals to a greater extent through organizational practices that encourage non-majority group members to participate and interact with the larger organization. Integration of these employees may bring benefits, such as the access to other demographics through increasing consumer relatability to the brand (Branca et al., 2024; Ferraro et al., 2023); however, such benefits do not come easily. Work must be done on the organization's part to ensure that inclusive and equitable policies, practices, and initiatives establish the expectations that manages to support people from marginalized populations within the workplace. This extends past simply having diversity, equity, and inclusion-related initiatives, as organizations may find that they fail to provide support in some employment systems over others (e.g., recruitment and hiring, supervision and mentoring; Trejo et al., 2024). The identification of these deficient areas, in turn, allows for organizations to strategically invest their limited resources in areas where support of their diverse workforce falls short.

While it is important for organizations to establish frameworks that support their diverse workforce, employers cannot provide the same training and developmental opportunities to all their employees, leading to strategic decisions on who is selected for further development. The

training proposed here intends to train managers to identify social network centrality characteristics in existing employees based on existing organizational data to give an alternate evaluation of an employee's value—apart from traditional measures of productivity and production—through a social network perspective when deciding who would be likely to provide the highest long-term returns for the developmental opportunities (e.g., mentorships) offered. In essence, the training explores employees who display desired authoritative qualities in non-traditional environment. Internal systems, such as knowledge management systems and communities of practice, may provide meaningful insights through Big Data that allow organizations to identify individuals who provide hard-to-replace value similar to star performers within the context of social network influence that organizations should aim to provide development opportunities for (Aguinis & O'Boyle, 2014; Fire & Guestrin, 2020; Oswald et al., 2020). Through this identification and provision of resources toward influential individuals within the social networks of these organizational diversity groups, the organization strategically reaffirms a commitment toward developing the talents of marginalized groups by training managers to supplement traditional evaluations of employee value with non-traditional measures that, nevertheless, are impactful to organizational functioning.

The following proposal contextualizes marginalized groups within the workplace through a social networks perspective with the goal of understanding the key role individuals may play within the organization's social network. Through training for strategic identification and provision of resources to these individuals within lower equity employment systems, we argue that organizations can fulfill the dual function of reinforcing social networks to be more resistant to cascades—small-scale events or phenomena that result in unforeseen outcomes (Kominek &

Scheffran, 2012)—whilst meeting expectations set by diversity, equity, and inclusivity-related promises through a broader integration of non-majority group members into the larger organizational social network.

A Social Networks Approach

Within social networks, the focus of this proposal is what we define as network structural path dependencies—nodes within the social networks who have limited connectivity with the rest of the network but are central within smaller clusters in the network—due to their subsequent impact on dependent nodes in event of cascade failures (e.g., negative sentiment spreading among minority employees; Kominck & Scheffran, 2012; Parshani et al., 2011). This proposal discusses social network characteristics and graph models, how these models and characteristics are reflected in organizational interactions between marginalized groups, and the potential impacts of outreach. We propose that training of supervisor-level employees to understand and identify centrality characteristics in their employees allows for strategic outreach toward influential nodes to positively influence employee perceptions of organizational commitments toward supporting their marginalized communities with as little resources as possible. Through integrating influential nodes from these diverse communities, the organization makes up for structural dependencies by establishing further connections between the main organization and proximal node clusters.

Social Network Characteristics. Social network analysts observe the linkages between nodes, clustering of nodes, and how these linkages and clustering inform how researchers may expect one node to impact other nodes and clusters (Tabassum et al., 2018). The social network analysis (SNA) perspective conceptualizes the relationships between nodes (or individuals)

within the social network through three centrality characteristics. Degree, which refer to the node's amount of immediate connections with nodes within the network. Closeness, which refers to the node's proximity to others nodes within the network. Finally, betweenness, which refers to how often a node serves as a mediator to shorten paths between nodes (Freeman, 1978). How these centrality characteristics affect node-to-node interactions varies based on initial social network assumptions.

Three commonly used model types—the Erdős–Rényi random graphs, Watts-Strogatz small-world model, and Barabási–Albert preferential attachment model—are examined to determine the appropriate assumption based on a decentralized context. The Erdős–Rényi graph employs a model that treats each connection with another node within the network as equally possible, with no preferential treatment toward any particular node within the network (Erdős & Rényi, 1960). The Watts-Strogatz small-world model incorporates an element of proximity within its connection assumptions, choosing to propose connections between nodes closer to one another before branching out into longer node connections. With the model's assumptions, the connections between nodes are in line with expected connection formations in organizational settings, while not having an individual node or group of nodes act as a hub that comprises a majority of the network's connections (Watts & Strogatz, 1998). Finally, the Barabási–Albert preferential attachment model assumes that nodes that establish connections early within an organization's social network have a higher likelihood to establish connections between other nodes and function as a hub within the organization's social network (Barabási & Albert, 1999). Between these three models, the Watts-Strogatz and Barabási–Albert are relevant to our discussion. Connections between nodes in organizations have historically functioned similarly to

the Watts-Strogatz assumption, with nodes forming stronger connections between individuals in the immediate environment and weaker connections with a few individuals from the greater organization. However, within the context of geographically dispersed multi-national organizations, the reliance on online platforms to communicate and connect with others leads to assumptions that would be similar to what is expected in the Barabási–Albert model, wherein influence may be dependent on visibility on these platforms.

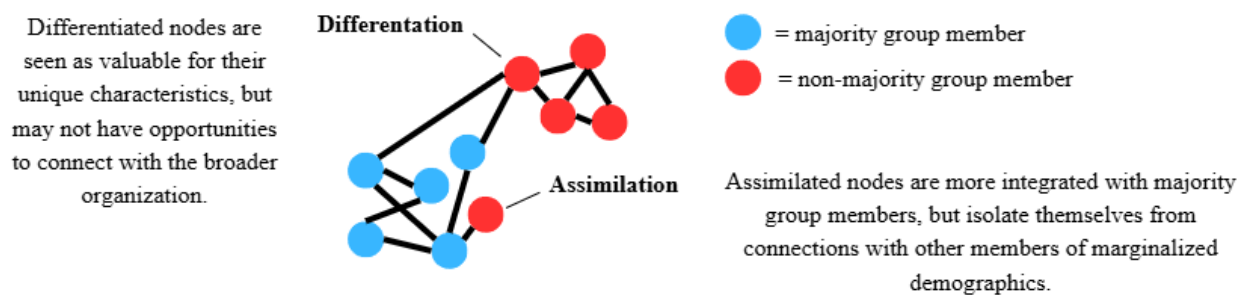
Another relevant feature within SNA related to the hubs mentioned in both the Watts-Strogatz and Barabási–Albert models are clusters. As discussed through the Watts-Strogatz small-world model, clustering is expected to occur as closeness, or proximity, often leads to nodes forming connections with one another through codependent processes, such as individuals working together in a team. These large- (e.g., branches, organization) to small-scale clusters (e.g., within-, between-teams) may be defined through formal structures, such as organizational hierarchies (Oberg & Walgenbach, 2008), or more informal structures, such as geographical location or demographics (Cencki et al., 2019; Reid et al., 2008). What is considered “close” in virtual environments can begin to blur, as while proximity to others within the team may be farther physically, geographically dispersed teams still work concurrently on codependent processes to achieve success similar to in-person teams.

While clustering is not seen in a traditional sense, teams may still nevertheless stay “close” through leveraging online mediums available, such as Microsoft Teams and Zoom, where meetings are held consistently to ensure accountability despite physical distance. These online mediums also bring into question the importance of early establishment of a node in an organization’s social network to increase its influence as, similar to what is discussed in the

Barabási–Albert preferential attachment model, early content generators within an organization’s internal systems may be favored and become influential simply due to a lack of other posts that employees of the organization can interact with. Over time, these early content generators may grow their influence without diversifying connections between the nodes that it influences, creating a precarious network structure (Parshani et al., 2011).

Real-World Counterparts. This introduces an interesting conflict when looking at employees from marginalized groups, as the barrier to have content seen by others within the organization, and subsequent opportunities that arise from that, theoretically makes influence more accessible as individuals are able to slowly grow their influence within these organizational internal systems through indicators such as posts, comments, and shares (Brzozowski et al., 2009). Hypothetically, these lower barriers to entry would facilitate the ability of non-majority group members to interact with members from the majority group. However, the ways in which non-majority members interact with others from the same or other marginalized demographics, and how they interact with majority group members, can vary if the organization has not created the environment in which diversity may thrive.

Figure 1. Social Network Example of Assimilation and Differentiation Within Organizations



In one outcome, employees from these underserved communities may choose to partake in code-switching behaviors that seek to emulate the mannerisms of the dominant culture to increase feelings of belongingness to the rest of the organization and avoid contrasting oneself from their peers (e.g., agreeing with others and avoiding sharing one's ideas if rejection is perceived to be associated to one's identity; Essed & Goldberg, 2002; Roberts et al., 2014). This assimilation of oneself can result in avoiding similar others as not to seem exclusionary toward majority members (Boulton, 2016); however, even with such rejections to the self, non-majority group member's status as part of the organizational in-group may remain tentative without existing organizational frameworks supporting an inclusive climate, inclusive leadership, and inclusive practices (Shore et al., 2011). Furthermore, this suppression of the self has been noted to increase emotional labor through self-monitoring behaviors and deep-level acting in employees that may contrast the authentic self (Becker & Cropanzano, 2015; Cha et al., 2019; Boulton, 2016; Weeks et al., 2024), impact quality of customer-employee interactions in customer-facing jobs (Mesmer-Magnus et al., 2012; Groth et al., 2009), and leads to increased turnover intentions (Garlington et al., 2023).

In another outcome, the employee may choose to not suppress aspects of their diverse background within the organization, however cultural differences in conceptualization, such as the interpretation of gestures and actions, may cause friction between individuals of different cultural backgrounds (Levinson & Majid, 2014; Wildman et al., 2022) and perceptions of what (and how) professionalism should look like can affect an individual's success and acceptance within an organization (Boulton, 2016; Lappeman et al. 2024; McCluney et al., 2021). While an employee may be able to express themselves within the workplace, if organizational practices

and norms have not built the frameworks necessary to support a diverse workforce, these expressions, contrary to norms of the majority group, may differentiate and limit an individual's ability to create connections with others within the greater organization's networks. In other words, there are drawbacks in both cases, as individuals engage in identity management—needing to balance how authentically they represent themselves in the workplace through their relative proximity to majority and non-majority groups and adjusting their behaviors depending on expectations of professionalism (Cha et al., 2019; McCluney et al., 2021).

The subsequent impact on the organization's social network can be felt, as while the individuals who conform to the majority's norms may be more integrated and connected to members of the majority group it may come at the cost of connections with others of the same non-majority group (e.g., avoiding to associate with members of the same non-majority demographic to align self to majority norms; Boulton, 2016). While this provides opportunities to the individual more integrated with the majority or in-group, avoiding voicing dissenting opinions nullifies the benefits that alternative perspectives can capture that groupthink ignores (Shaw & Barret-Power, 1998). Furthermore, an organization that incentivizes members of the non-majority group to conform with majority-group norms and expectations may lead to negative sentiment toward organizational intentions, as growing skepticism toward the organization's commitment to diversity may make future diversity initiative attempts more difficult to get employee buy-in (Showkat & Yahya, 2025).

Outward symbolic representations of diversity, such as the availability of diversity-related resources, are not enough but are often conflated as the organization's commitment to diversity, equity, and inclusion (Yi et al., 2024) as the availability of such

resources do not address factors, such as identity threat or psychological safety, that affect non-majority group members' ability to identify themselves as belonging with the organization (Kafka, 2023). Non-majority group members, as a result, may feel tokenized—othered and placed within the non-majority group by the organization (Kanter, 1977)—as organizational systems may fail to provide meaningful career progression opportunities or encourages expressions of opinions and contributions by non-majority group members. Furthermore, their presence may serve as a deflection whilst perpetuating the current status quo that fails to provide accessible opportunities to non-majority group members (Albert & Laberge, 2017). Alternatively, non-majority members who remain authentic to themselves within these situations may have a more difficult time forming connections with those from the majority group (Cha et al., 2019); while interactions within internal systems have low barriers to entry, there is no guarantee that posts and other interactions made by non-majority group members will have the same readership and influence as nodes located closer to other majority group members (McGail & Feld, 2026).

Dependencies and Outreach. This seeming contradiction between aligning oneself with others of similar backgrounds and conforming to the majority draws our attention to the individuals who have achieved a balance between the two and how such influence can lead to stronger cascade effects. Nodes that have achieved a balance can function as central hubs of contact within clusters of non-majority group members and maintain ties with the greater network, allowing for organizations to leverage diversity-related benefits; however, due to factors that may negatively impact this balance, there may be few nodes within the network that realistically function as intermediaries between the two, making social network events such as cascades more volatile. Cascades, or social cascades, is a phenomenon where individual-level

decisions impact institution- or organization-level outcomes—typically in a spiraling fashion (Kominek & Scheffran, 2012). Comparing Watts-Strogatz and Barabási–Albert models, the initial shock of cascading events are expected to be more impactful in organizations where the Barabási–Albert preferential attachment model is applicable. Within Barabási–Albert model assumptions, the activation of a centralized hub can result in a lower threshold for contagion within social networks due to the positioning and influence of the most connected nodes within these non-majority groups and the rest of the organization (Borgatti et al., 2009; Park et al., 2027; Watts, 2002). This differs from expectations of the Watts-Strogatz small-world model, where the impact of cascading events theoretically has higher thresholds to trigger cascades, as centralized nodes in the Watts-Strogatz model represent one of several similarly structured nodes within the network (Park et al., 2027; Watts & Strogatz, 1998) versus the highly connected and centralized nodes observed within a preferential attachment model. In either model, this proposal argues that organizations could mitigate the risk of negative cascade events by increasing interconnectivity between majority and non-majority group clusters through the strategic investment in central individuals within the organization’s communities.

This strategic investment in non-majority group members based on centrality characteristics ultimately aims to reduce the presence of structural holes—a sparse zone present within denser areas in the network (Li et al., 2021). Through identifying central individuals, providing resources for career development, and utilizing their paragon status within their communities to increase buy-in over time, organization may develop increased non-majority group participation with the broader organization that encourage robust social network connectivity. This training seeks to reduce social network dependencies—a lack of linkages

between key nodes in a network, or an overreliance on one key node to serve as an intermediary between majority and nonmajority groups (Garvey & Pinto, 2009)—by stressing the importance of non-traditional evaluation factors that should be considered when deciding career development opportunities. This proposal will now briefly discuss the organizational mechanisms, or internal systems, of interest before going into preliminary considerations to evaluate prior to implementing training.

Organizational Mechanisms

One way in which organizations have historically utilized to increase employee involvement is through affinity groups, defined by Van Aken and colleagues (1996) as association of peers who meet regularly to share information, capture opportunities, and solve problems that affect the group and overall organization. Evolutions of affinity groups have emphasized certain goals the group should achieve. Peer development groups (PDGs) are composed of individuals of similar status meeting up with the goal of supporting member development. Employee resource groups (ERGs) are composed of individuals of similar demographics and backgrounds providing career and emotional support. Finally, communities of practice (CoPs) are composed of other employees and practitioners of the field aimed at continued learning of the practice (Terekhin & Aurora, 2025). CoPs—defined by Wenger (1999) as a result of the mutual interactions between the competence and experience of its members who perpetuate a growth mindset based on shared characteristics and ideas—and ERGs—organization sponsored groups, typically based on various commonalities such as demographics, lifestyles, and interests (Wellbourne et al., 2015)—function similarly. Both groups provide a forum for people of varying organizational statuses to meet individuals who have

commonalities across a wide variety of dimensions to the benefit of their members (Cenkci et al., 2019). PDGs, in contrast, approach development of its small group of members in a structured fashion founded on a deep, mutual exploration and a holistic understanding and consideration (Terekhin & Aurora, 2025) with the specific goal to uplift and direct members toward career development.

In this proposal, we are interested in the connections and influence formed between individuals within these looser, more casual settings, such as ERGs and CoPs, and the connections within more career-development focused groups such as PDGs. Differences between group settings may be tracked through the quantity of posts, comments, and interactions (e.g., readership, shares, likes), with the expectation that employee interaction within the internal system of their choice may. Training of supervisor-level employees should allow them to note these differences in employee interaction levels within the various groups their employees may be in, provide development opportunities to individuals who perform well across group types, and do their part as a supervisor to encourage organizational norms and practices that promote a diverse work environment. As this proposal is focused on identification of influential nodes, we discuss employee and manager qualities relevant to the proposed training.

Employee Qualities

Belongingness. Wenger (1999) defined belongingness within CoPs to consist of three aspects: engagement—the way interactions with members shape our experiences, imagination—how interactions with members contribute to our worldview and potential possibilities, and alignment—the matching of beliefs to work toward a mutually desired goal. Across the various internal system groups mentioned, this proposal uses this definition of

belongingness as modern-day groups should seek to platform and uplift members within their community through the provision of opportunity and resources employees may otherwise not have access to. Employee perceptions of belongingness are also expected to affect levels of engagement within the organization's internal groups, as groups have been found to bring benefits such as increased employee engagement, satisfaction, and retention (Terekhin & Aurora, 2025; Wellbourne et al., 2015). In leveraging the power these groups provide, organizations have an opportunity to create spaces of psychological safety and create diversity-inclusive workplace environments that increase the likelihood of diversity-related benefits. As such, supervisor-level employees should acquire skills that improve their team's culture to improve perception of belongingness.

Readiness to Learn. One factor noted by Aguinus and Kraiger (2009) for transfer is whether trainees are ready to be trained or learn. Those ready to learn experience lower levels of anxiety, allowing them to more meaningfully engage with training content. When supervisors observe their employees, readiness to learn traditionally may manifest through a desire to apply knowledge learned through formal and informal contexts within their position and inquisitiveness about their tasks. Within online mediums, readiness to learn may manifest through user interactions with others, leaving behind higher quantities of interaction markers or digital exhaust. Of these interaction markers, readership and quality of post interactions (e.g., comments versus likes) are potentially more indicative of an employee's willingness to currently engage in organizational processes and future intentions of engagement. Individuals who are willing to exchange information with others within the organization can, our proposal argues, indicate a readiness to learn, as consistent content generators' posts may function as an

information exchange hub where other professions within the organization can exchange opinions and thoughts. This proposal expects user interactions with internal systems to increase over time, beginning with low-commitment methods of interaction such as liking or sharing user forum posts, and gradually increasing the level of commitment in their interaction through posts generated by the employee themselves or participation in discussions through comments or forum post replies. Supervisor-level employees will be trained to interpret data related to user interactions over time to determine which individuals serve as central individuals within the organization's social network.

Manager Competencies

Transformative Leadership. To foster leadership in employees, we first target the style of leadership we want employees to model. Transformative leadership is a style of leadership that aims to increase idea generation through the inclusion of multiple perspectives to create new, novel paths for organizational success (Korejan & Shahbazi, 2016). This may be useful in an organizational context where existing knowledge frameworks may act as barrier that systematically obstruct non-majority groups from being able to participate (Shields, 2010) and manager intervention can influence employee opinions as systems in place. Transformative leadership affects employee behavior through four components as identified by Avolio and colleagues (1999). Idealized influence relates to a leader being admired, respected and trusted; these leaders are respected as they are willing to self-sacrifice for others and in turn inspires followers to emulate behaviors of their leader. Inspirational motivation relates to a leader's ability to motivate others through envisioning and making future states identifiable with followers. Intellectual stimulation relates to the leader's ability to promote creativity, innovate,

and be willing to question and challenge assumptions; this leads to followers emulating leader behaviors to also be willing to express ideas and offer alternative perspectives to organizational problems. Finally, individualized consideration relates to the leader's ability to identify individual needs of followers and provide a growth environment that allows for needs and desires to be met (Bass et al., 2003).

In the context of this training, managers will be trained to display characteristics that encourage employee inquisitiveness and desire to grow themselves within the organization. A transformative leadership style can generate perceptions of belonging through the unbiased consideration of all options, lowering potential apprehension from members of marginalized groups from participating in organizational processes--in line with findings on transformative leadership practices improving affective commitment toward the organization based on the inclusive practices established (Ashikali & Groeneveld, 2015). Furthermore, the cultivation of interests and awareness of organizational resources available allows for managers to redirect employees in the event that their experiences and interests are not suited to provide mentoring to an employee under them.

Cross-Cultural Awareness. Knowledge related to cross-cultural awareness ties in with the individualized consideration of transformative leadership. Diverse employees need to feel like they belong within the organization and have opportunities to develop themselves within the organization (Mugo & Puplampu, 2022) for organizations to benefit from the alternative perspectives and opportunities that counteract groupthink and increase market competition. Training on this topic will educate supervisor-level employees on barriers faced by members of marginalized groups within organizational settings and use that knowledge to help managers

practice identifying a range of problematic behaviors (e.g., microaggressions) toward non-majority employees. Additionally, supervisor trainees will be made aware of internal organizational identity-based support groups that employees may find insightful when exploring their place within the organization.

Trainees will familiarize themselves with the various support and resource groups available within the organization, as supervisor endorsement and support of these resources can add legitimacy and trust within these resources—potentially resulting in positive cascades of endorsement from beneficiaries of the system. Identity-based support groups, such as ERGs, allow for employees to connect with others of similar backgrounds, allowing for an alternative perspective on current struggles of a perceived lack of belongingness or person-organization fit. This support is meaningful compared to symbolic representations of diversity for employees, as the presence of members of marginalized groups within positions of power may lack perceived relatability between members of marginalized groups and the faces of diversity advertised by the organization—while the demographics may be the same, the individual experiences may not (Yi et al., 2024). These groups, from an SNA perspective, also can provide linkages between previously unconnected clusters, allowing for a robust communication network to be formed across the organization.

Team-Level Culture. Team culture ideally incorporates aspects of a shared leadership approach, as managers can provide formal authority that reinforces diversity-promoting organizational norms and behaviors while allowing team members to grow, contribute, and influence the team's culture over time (Zhu et al., 2018). Managers must understand how they influence the team's culture and consider how team members influence also impacts overall team

culture. Training on this topic will discuss the need to develop an information-exchanging culture that encourages between-member exchange (Lucas, 2010) and how managers can encourage participation, communication, trust, and support provided between themselves and also between team members to improve effective team functioning (Shah et al., 2023). Supervisor-level employees will be expected to be able to apply concepts learned from cross-cultural training and transformative leadership when shaping team culture.

Needs Assessment

Assessment Areas

Organizational. An organization-level needs assessment involves a determination of training appropriateness based on the needs of the organization, the resources required, and the degree of peer and managerial support (Noe, 2017). This training is appropriate for organizations who have internal employee development plans that struggle to provide opportunities to develop employee talent within hybrid and remote work environments, particularly for those within non-majority demographics. This is also appropriate for a workplace that may have a low percentage of non-majority members within their workforce that are looking to expand the diversity of their workforce in preparation for expansion (e.g., expanding from a small-scale to an intranational organization). To determine whether this training is needed, small focus groups consisting of subject matter experts (SMEs) may be recruited for interviews. These SMEs will include supervisory-level employees and diversity, equity, and inclusion experts, with interview questions focused on potential structural barriers to performance within the workplace, observations of organizational culture, and personal suggestions on what can be done to improve the employee development system across individual employment systems. Structural barriers and

observation of culture will be separated through employment systems, broken down through the ten identified in the Equity of Employment Systems Framework (i.e., “job structures and training” and “career development”; Trejo et al., 2025). Suggestions on what can be done to improve these systems will also be through the seven identified levers of change in Trejo and colleague’s model: policies, practices, audits (i.e., planning and evaluation), roles and accountabilities, culture (e.g., organizational values expressed within mission statement), climate of inclusion (i.e., belongingness), and communication—within the context of organizational internal PDGs, ERGs, and CoPs.

The interview will be conducted on Zoom by job analysis consultants, with SMEs anonymized and cameras are not required to be on. This is due Zoom’s formatting allowing one to extensively self-monitor oneself during a meeting, which may cause social desirability effects to interfere with the expressed content by the SMEs (Ngien & Hogan, 2023). The possibility of extensive self-monitoring in interviews may result in problems failing to be identified; anonymizing participants completely aims to reduce response anxiety to allow focus on expressed content, specifically when discussing sensitive topics (Adams, 2026) such as workplace discrimination. The interviews will be transcribed, and the thematic content of the interviews will be analyzed by a team of research specialists to identify recurring barriers noted by SMEs. This thematic analysis will utilize an inductive, latent-level approach, meaning that the interview content from the SMEs will develop our concepts of interest, and researcher expertise will be utilized to inform experiences across individuals into general themes and issues organizations should address (Braun & Clarke, 2006). If it is determined from thematic analysis

that the organizational systems are failing to provide opportunities in some employment systems over others, then this training is appropriate for use.

Person. A person analysis determined which employees should be targeted for training and whether training is required to fix the problem in the first place (Noe, 2017). One specific competency desired in trainees for this training is social media competency—defined in this training as a baseline understanding of user generated content (e.g., posts, comments) available within internal systems and how content spreads across the organization. As there is an emphasis on the role of digital markers and exhaust generated from internal, or enterprise, systems within the organization, it is necessary for employees to understand organizational systems available to properly make sense of the data being provided to them. To determine the general organizational understanding of enterprise systems available, a survey will be randomly distributed to supervisor-level employees in the organization asking participants to rate their computer skills and their familiarity with the organization's available internal groups and available resources. If it is determined that a significant portion of managers and employees are not familiar with organizational resources, separate training may be developed by the organization to train individuals to access and interact with aspects of the organization's resource groups. This tutorial should include an overview of the available PDGs, ERGs, and CoPs within the organization that managers may encourage new employees to utilize to develop connections with individuals of similar backgrounds. Once individuals are familiar with the organization's resources, we may deem these supervisors ready to be included within our training population.

Employee Development

As a program that establishes a sort of mentorship-style role for managers, this training provides development opportunities for both employees and the supervisors. This program focuses on increasing engagement between supervisors and employees, as research has given evidence for the leveraging of mentorship to promoting DEI within the workplace, such as increased likelihood of the recruitment, retention, and feelings of belongingness in members from marginalized groups (Marshall et al., 2022; Okafor et al., 2024). Aspects of this program would have managers engage in employee development activities, with managers being informed of relevant organizational resources that lend social support or an avenue to develop their interests further within the organization. By managers being aware of such resources, they may be able to refer the employee to ways of assessing their knowledge to give a clearer direction on areas in need of improvement.

This program would receive further benefits if implemented within an organization that has a flexible approach to career management, as employees are encouraged to develop their interests within the organization to potentially relocate them into a position that results in greater person-organization fit. For supervisor- or manager-level employees, this training presents an opportunity to develop soft skills necessary to manage employees and participate in organizational networking practices that keep communication flowing. Employees under these managers and supervisors enjoy benefits from this training through having supervisors well-versed in organizational resources, allowing for accurate recommendations of support groups available that may help employees integrate into the organization's social network smoothly. The establishment and endorsement of these resource groups also benefit the organization, as processes such as succession planning may informally begin through mentoring

opportunities available between new and old employers within the organization in these groups. Furthermore, the amount of effort by managers to help employees develop may increase feelings of organizational embeddedness, reducing the likelihood that succession plan candidates will leave the organization.

Design and Methods

The order in which the training concepts will be learned are as follows: cross-cultural awareness, transformative leadership, team-level culture development, and how these concepts may manifest within organization internal systems and groups. The sequence of training is aimed to teach supervisor trainees the benefits of a diverse workforce and identify barriers to performance, how one can use transformative leadership to amplify the benefits of diversity while minimizing its barriers, and how these two concepts contribute to the cultivating of a positive team culture, and how strategically investing in individuals who contribute to the organization's social network can reaffirm the positive team culture being created. The blended approach, which incorporates e-learning and role-playing exercises, intends to familiarize trainees with lecture content before jumping into various scenarios where those competencies can be utilized through in-person roleplay exercises.

The lecture portion of each topic will be distributed through asynchronous e-learning modules—3 topics total, with 3 modules within each topic. Each module contains an estimated 20 minutes' worth of lecture content; however, trainees may take their time to read and digest training material content at their own pace. At the end of these modules, trainees will be asked to complete knowledge checks containing one question pulled from a test bank. This test bank will be composed of one short answer question that the test gives an estimate to trainees of 15

minutes total, though participants may take whatever time necessary to write their responses. This short answer question will incorporate all topics covered by the module (e.g., implicit bias and microaggressions for cross-cultural competency) within a workplace context (e.g., employee expresses feelings of lack of belongingness within organization). Trainees will be instructed to thoughtfully detail what steps they would take to help develop opportunities and skills applicable to career growth in their employees. As the goal of the exercise is to train critical thinking skills within supervisors in a variety of scenarios, the questions they will receive will be randomized. All questions will be screened through a panel of SMEs that will verify the realism of the scenario detailed, suggest possible solutions that would encompass best practices detailed by training materials, and ensure each item allows for trainees to demonstrate their ability to flexibly and thoughtfully address problems identified in the questions. The e-learning incorporates several knowledge checks during and after the modules to: (1) ensure that the trainee is paying attention to course content, (2) breakdown the module's lecture into smaller chunks for digestibility and convenience, and (3) provide more opportunities for trainees to apply knowledge from the lecture—giving opportunities to generalize the concepts and work toward far transfer (Lee, 2010).

For the in-person roleplay exercise section of the program, trainees will meet at a location within the organization that mimics the workplace environment (e.g., a room with cubicles). Within this setting, a training specialist will lead the first scenario with another training specialist in order to communicate what information is available for the person participating in the roleplay. Situations presented in the roleplay exercises will be based on the organization's history to increase perceptions of fidelity. To accomplish this, interviews will be conducted with SMEs

from the organization who have stayed with the organization for at least half a decade. These SMEs would then be asked to describe various scenarios throughout their supervisory careers, actions taken by employees at the time, and the outcome of those actions. Content from those interviews will be used to create the scenario questions presented by trainers, who will mention the relevance of the scenarios with the organization's history to increase perceptions of realism. At various points in the exercise, role-playing trainees will have the option to influence the outcome of the scenario based on choices they come across (e.g., choosing whether to intervene when noticing implicit bias in others' actions). Trainers will emphasize the purpose of the exercise as a means of exploring options in a safe environment, and that practice will allow managers to flexibly apply their critical thinking to find an optimal solution to workplace conflicts and problems.

Participants will be given the following information about the persona they are roleplaying: name, job position, priorities, and beliefs. This is to give trainees more guidelines on how their character within the roleplay should act to reduce apprehension of acting since they are acting in line with their character, and thus their actions don't reflect themselves. Roleplaying days are Thursday and Friday, with one session conducted via Zoom in order to acclimate managers to applying training concepts across common situations they may face within the workplace. Trainees will alternate between weeks of roleplaying on Zoom and roleplaying in person first. Formatting of a sample training schedule may be found in Appendix A. The Zoom session will still take place on-site, with trainees will be placed into different rooms within the organization with Zoom setup with the computer to avoid complications related to trainee accessibility issues. The hope for the Zoom sessions is to train managers to be able to address

issues within digital spaces, since the medium of communication lends less flexibility to immediate action to correct an undesirable behavior. Furthermore, the intention of an in-person and Zoom setting may help supervisors understand the potential stressors non-majority group members may face in the workplace. Through these roleplaying exercises, we hope to develop a stronger cross-cultural understanding in supervisors that they may leverage toward aiding in the development of skills and career opportunities for individuals critical within the organization's broader social network within their teams.

To develop trainee understanding of the applicability of these concepts within organizational internal systems and support groups, two technical workshops will be given that are intended to lecture supervisors on the available resource groups available and how they can utilize Big Data available to identify influential individuals within those groups. The workshop will cover various scenarios where trainees will be provided with data on various employees with the goal of identifying influential individuals within their communities that may be selected for future development. Trainees will discuss with one another which employees will be best to select for further career development, with the goal of broadening supervisor assessments of employee value through incorporating non-traditional evaluation metrics. At the end of these training workshops, trainees should be able to identify influential individuals and utilize the other training accumulated through the roleplays and modules to devise an employee support plan that may aid in employee and organizational network development.

A 20-question formative assessment, composed of 18 multiple choice (6 questions for cross-cultural awareness, transformative leadership, and team-level culture development) and 2 open-response questions prompting trainees to identify influential individuals within a

hypothesized social network, will be administered one week after the final training day. This is to give trainees some time to rest after four weeks of training and is a low-stakes assessment aimed at gauge supervisor understanding of trained concepts with the intention of guiding these supervisor trainees toward appropriate resources that may help them understand the content better. During the period leading up to the formative assessment, trainees will still have access to the modules and lecture materials offered during training to review and take practice questions pulled from a test bank containing all four topics. Upon successful completion of the formative assessments (grades at or above 70%), trainees will be notified that the training is complete. Trainees who fail to meet the formative assessment to a passing capacity may choose to meet up with one of the training instructors to discuss what they got wrong and resources they may reference to learn more.

Managers will be informed that there will be follow-up surveys distributed at the 1-month, 3-month, 6-month, 1-year, and 2-year mark from the hiring of a new batch of employees. These surveys are to track the impact of the concepts trained and their applicability to the workplace over time. This allows for the organization to make determinations on whether the efficacy of identifying key individuals and whether it has had an impact on the overall culture within the organization (e.g., employee sentiments, public perception to brand; Mills Cox, 2026). New employees will also receive a survey that asks them to evaluate their supervisor based on perceptions of team culture and career development opportunities.

Learning, Motivation, and Transfer

Learning and Motivation

This training utilizes principles of Information Processing Theory (IPT; Simon, 1978), Social Learning Theory (SLT; Bandura, 1977), Expectancy Theory (ET; Vroom, 1964), and Adult Learning Theory (ALT; Knowles, 1978) as a basis to promote learning, motivation, and transfer in employees.

Information Processing Theory. IPT discusses how translation of information from short-term memory (STM) to long-term memory (LTM) is affected by characteristics of the situation itself, such as cues and contexts (Simon, 1978; Wickens & Carswell, 2021). IPT is integrated in the e-learning design of the training modules, as the lectures provided are chunked into digestible 15-minute chunks followed by a short 2-question knowledge check to ensure that trainees are properly obtaining the content into STM. The ways to encode STM into LTM will come in the training design, where the first day is focused on obtaining declarative knowledge while the latter days are focused on roleplaying to get a procedural understanding of how one may apply the concepts learned to a real-world scenario. Roleplay content will emulate contexts that the manager may find themselves in, consisting of a mix of situations within the office and Zoom calls. These familiar scenarios are intended to help give the trainee similar cues that would be present in a non-mock scenario, so the choices made during role-playing are more likely to be made during actual manager-employee interactions within the workplace.

Social Learning Theory. Bandura's SLT discussed how individuals are able to learn through observing models of a behavior, performing that behavior, and receiving reinforcement or rewards based on whether the behavior was replicated successfully (Bandura, 1977). This training integrates SLT in two different ways. First, for managers participating in the training, the role-playing section allows trainees to first witness two professionals engaging in a conflict

scenario and how training concepts can be integrated through interpersonal communication. As trainees will have the opportunity to be the problem-causer (e.g., person with implicit biases making microaggression), problem-solver (e.g., manager observing an employee interaction), and audience. Through these various roles, trainees are able to consider the multiple different perspectives in a conflict scenario, the competing priorities that individuals may have, and how they may react, given what the training and observation of others has taught them. SLT is also the reason why managers will be trained for transformative leadership, as we wish to model the characteristics of a transformative leader to newly hired employees to inspire a leadership style that strives for inclusivity and innovation.

Expectancy Theory. ET by Vroom (1964) is composed of three components: valence—the affective orientation toward an outcome; instrumentality—the probability of obtaining one outcome over another; and expectancy—the subjective probability of achieving a desired result. ET is integrated into our training in both the e-learning modules and the role-playing exercises. To provide external motivations toward participation in the training, participants will be told that the training is an opportunity to develop skills preparing them for higher managerial positions. In the training itself, the modules will provide knowledge checks for trainees. These knowledge checks will require the participant to get two questions right, which were randomly selected from a test bank at the end of the module. This requirement of getting the questions right increases the likelihood that trainees are absorbing the training content in a meaningful way and trainees will be allowed three attempts to pass both randomly assigned questions. As this training is optional, trainees who fail to pass within three tries of the knowledge checks of a module may be encouraged by instructors to more actively participate in role-playing exercises. We expect that

trainees that meaningfully engage with the training content will feel more prepared during the role-playing exercises conducted, as they have received some reassurance that they are grasping key concepts within the module. Furthermore, these role-playing exercises allow trainees to safely understand the potential outcomes of acting in non-optimal ways, allowing trainees to learn through error management and for mistakes to be corrected in a safe environment.

Adult Learning Theory. Knowles' ALT (1978) draws attention to factors within andragogy that influence adult learning. These factors are: (1) adults will seek to learn when they have needs or interests that knowledge may fulfill, (2) orientation to learning is life-centered, (3) experience is a resource used during adult learning, (4) adults have a need to be self-directed, and (5) individual differences influence the manner information should be structured or presented. Much of the aspects of ALT will be integrated in the role-playing exercises conducted by trainees. While situations created are based on real events that occurred within the organization, participants will have ample time to discuss with peers and the instructor regarding the outcome of the trainees' choice and constructive evaluation on what worked well for the employee and what did not work given the scenario. During these discussions, participants will be encouraged to integrate their experience into the actions they may take during a situation and why that may potentially lead to better outcomes than the scenario's premade solution. Roleplaying days will have two different scenarios for discussion made, however if trainees wish to set up their own scenario based on their experiences, one training per day may be substituted for a trainee-made scenario. Trainees must gain approval from the training instructor to verify the scenario being proposed is appropriate and relevant to training.

Transfer

Expectancy Theory. To ensure that training is able to be transferred and maintained long-term, the organization will emphasize the benefits of refreshing competencies learned through small incentives that fuels motivation to retain and utilize training knowledge (e.g., additional time added to the manager's break) or larger, more long-term incentives (e.g., ability to work remotely for an additional day, career advancement) to reward managers who engage with their employees and whose employees accomplished the most working toward organizational goals. Managers will qualify for such programs through tracking of change in participation, or maintenance of high participation, of manager supervisees within enterprise systems and individual contributions across individual and team projects. Occasional knowledge checks are offered and voluntary for managers, but it is expected that managers who refresh their knowledge on the training will act more decisively when confronted with scenarios similar to those encountered in roleplay.

Organizational Environment. As touched upon during the needs assessment section, the current state of the organization's culture and whether employees are presented opportunities to develop is necessary to increase the likelihood training is effective. While this training is focused on developing skills for managers, support from those who oversee them or those within the C-suite of the organization can increase the likelihood that managers continue to practice and apply the trained knowledge in their interactions with their employees (Joseph & Bogue, 2018). One form of manager support is supervisor feedback to middle managers to identify what they can start to do, what they can continue to do, what they should do less, and what they should stop doing altogether (Yelon & Ford, 1999). The C-suite or upper-level managers actively showing interest in the training content, discussing the ways that it affects managers, and discussing the

managers' perceptions of how it affects their employees all prompt a deeper level of reflection in managers of how the training's content affects everyday function, leading to a higher chance of encoding relevant information into LTM.

Training Evaluation

Multi-level Review

Quality of training will be evaluated Kirkpatrick's levels of evaluation (Kirkpatrick, 1997). Kirkpatrick's model of evaluation has been shown to be useful across a variety of contexts, adaptable, and is able to achieve high levels of performance when evaluating training (Alsalamah & Callinan, 2022). Kirkpatrick's model for evaluation (1997) can be broken into four components--(1) reactions: how the trainees feel about instruction given; (2) learning: trainee performance on assessments; (3) behavior: the degree concepts learned during training are transferred into the workplace; and (4) results: organizational benefits derived as a result of the training. Of the four levels of evaluation detailed, this proposal focus on the reactions, behavior, and results levels.

The aim of the training is to increase participation of non-majority members with the broader organization through the strategic targeting of influential individuals in the organization's social network. As this training is meant to increase non-majority member integration through positive perceptions toward organizational commitment to promoting a diverse and inclusive workplace, reactions will be tracked to adjust organizational resources and training if necessary. Behavior is tracked as the desired outcome is proficiency in organizational resources available to encourage employee development, specifically those within non-majority groups. Finally, results are tracked as establishing a linkage between managers trained by this

proposal and subsequent positive outcomes, such as increase team revenue per quarter, justifies the continued training of managers in these important competencies. Learning is not evaluated as strongly, as the training ultimately prepares supervisors to use critical thinking to evaluate organizational systems and provide accessible opportunities for non-majority group employees; alternatively, it matters less that supervisors know the technical terms covered by the training than it does for actually applying training concepts and positively influencing perceptions of organizational commitment to diversity.

We increase the reliability of our evaluation through the inclusion of multiple perspectives, aiming to sample around 50% of the trained sample to reduce biases or social desirability effects by sourcing various responses from managers and employees. This data can supplement other objective forms of data, like recorded interactions within the enterprise systems and individual contributions to the organization, to determine if managers' behaviors have changed in ways that support and provide career development opportunities with their employees once trained.

Reactions. Managers and employees will fill out two slightly different surveys. The employee survey will focus on evaluating their manager based on their contribution toward a positive team culture that encourages participation in organizational resource groups. The employee survey will also have a section that asks the employee to reflect on their experiences within the organization and how the steps they are taking to develop themselves within their position. The manager survey, on the other hand, will identify individuals who they believe are suited for further development, the level of engagement between the employee and managers, and ratings on the importance (1 = Not important, 2 = Somewhat Important, 3 = Important, 4 =

Extremely Important) and frequency (1 = Rarely Applicable (once or twice a month), 2 = Somewhat Applicable (weekly), 3 = Applicable (2-3 days a week), 4 = Extremely Applicable (daily)) of competencies learned from training when engaging in manager-employee interactions on a 4-point Likert scale . These reactions will be recorded at five different time intervals, beginning 1-month post-training, 3-months post-training, 6-months post-training, 1-year post-training, and 2-years post-training to understand the impact of training over time and determine if observed changes in employee development over time can be partially attributed to the trained competencies of this proposal. Furthermore, collecting these reactions gathers valuable information on where the training may fall short that future iterations of this training may address.

Behavior. To determine behavior changes, employee responses to the survey detailing their own progression within the organization and the quantity of interactions across resource groups will be analyzed. It is expected that employees who have managers that promote what is learned in this training proposal will be more likely to engage in the organization's resource groups (Eisenberger et al., 2002), and participation within various communities may help managers identify central individuals in the social network. Behavioral changes in managers will be evaluated through employee and manager evaluations to gain a more objective perspective of the training's impact to understand the applicability and importance of the training on the manager's day-to-day work. These evaluations would ask supervisors to rate the frequency of applying training concepts, importance of concepts in their current position, and an open response section that allows managers to detail the ways in which they have utilized their training to help develop the skills of their teams. The supervisee evaluation would ask questions

related to manager behaviors (e.g., “Has your supervisor made you aware of available organizational media?”) to determine whether managers are genuinely applying training concepts in their daily work. Additionally, this supervisee survey would similarly have an open response section that would allow them to detail specific resources referred to and the impact of their resources in familiarizing and integrating the supervisee with communities within the organization. These ratings additionally may be used to cross-reference employee interaction with organizational enterprise systems and their influence within the organization’s social network to determine the efficacy of this training.

Results. Organization-level results will be determined through the individual and team contributions toward the organization and progression through the organization’s employee development structure. This more objective approach is in response to training that includes DEI-related content, often focusing on individual perceptions without tying it into tangible organizational outcomes (Devine & Ash, 2022). Individual contribution toward the organization may be measured through involvement in team projects and performance relative to peers within the same department surveyed in quarterly reports collecting supervisor and supervisee opinions on the training’s impact on career development opportunities. Team-level performance may be compared to teams within the same department through the amount of revenue generated by that team based on project involvement. Progression through the organization’s development structure does not necessarily have to come in the form of promotion—progression may be manifested through pay raises for the employee or an increase in the responsibility or involvement in important team projects. If, based on analysis, we find that employees and teams

managed by those who underwent the proposed training, then justification will be built toward the continued usage of this training to further cement a learning organization culture.

Legal Issues

The content presented within the training, specifically for cross-cultural awareness, can result in legal issues if it were forced upon employees. Mainly, we wish to avoid any accusations of causing employees unnecessary psychological distress. This proposal justifies the potential psychological distress of the training during the cross-cultural awareness, as studies have pointed to a need to develop emotional capabilities when managing DEI-related resistance and fostering inclusive work teams (Boroş & Gorbatai, 2024). The training will emphasize that, while some of the scenarios may be seen as uncomfortable, being exposed to bigotry is necessary to ensure that managers do not freeze or are avoidant in addressing the issue since employee perceptions of the organization are partly influenced by managers. If an employee were to notice that a manager does not address bigotry within the workplace, perceptions of identity threat may increase while psychological safety decreases, resulting in less engagement and a higher likelihood of turnover intention. As we acknowledge the potential psychological distress present within the topic's content, a trained psychological professional will be present in the room if they are needed. Furthermore, to reduce the psychological distress of participants, trainers will conduct a debrief going over the roleplaying exercise and refer participants to other resources available within the organization if they require further professional help to reduce their distress. Furthermore, participation is not mandatory, though managers may suggest and promote the program to their employees as a career development opportunity.

Another point of contention with the cross-cultural awareness section is the perception that these practices are discriminatory toward majority group members. Studies have shown that members of the majority group still find programs that promote DEI as both a threat to their own resources—even if they do not lose anything—and a threat to meritocracy within the organization (Iyer, 2022). As a counterpoint, this proposal positions its inclusion of DEI-related content as a means to increase communication among employees within the organization's social network. Communication can be limited for members of marginalized communities due to a need to conform with the majority, which results in increased sensitivity from majority group members when there are expectation violations by minority group members (Lloyd et al., 2010). Without the DEI-related content within this training, organizations potentially lose access to unique perspectives and may further increase the gap in benefits that majority group members receive from informational exchanges with minority group members (Sinaceur et al., 2010). This proposal also argues that this is especially pertinent to multi-national organizations, as while there is a pushback toward DEI in the U.S. (Ng et al., 2025), this does not change the fact that members of the non-majority group compose a significant amount of the workforce within the organization. Pushback on increasing cross-cultural awareness by managers, from the perspective of this proposal, just shows a lack of readiness to engage with an international market as the importance of cross-cultural performance only grows as the world becomes increasingly globalized and interdependent.

Training Implementation

Objective

This training is intended to help managers develop the skills to identify capable individuals for further employee development. The desired outcome for this training is that managers are participative in the training of their employees, create a team culture of safety, and increase cross-cultural awareness. In practice, managers who participate in this training are expected to be able to notice employee interests in specific aspects of their position and be knowledgeable about organizational resources available to suggest—if the employee is interested in further development. Additionally, managers are expected to be able to identify potential barriers to employee performance and help employees overcome those barriers; whether it's due to feelings of isolation or lack of familiarity with software, managers will have a generalizable strategy utilizing available organizational resources to increase an employee's perceived in-group inclusion.

Participants

The experimental group of participants will consist of managers who supervise up to 15 individuals. This decision was informed by Cathcart and colleagues' (2004) observations at engagement among managers and employees finding that engagement noticeably differed among managers who supervise 1-15, 15-40, and 41-80 employees, and over 80 employees. As engagement between the manager and the employee is crucial for development, individuals who supervise over 15 individuals will not be included within this sample size. This is to ensure that managers theoretically have the time and resources available to assist in the development of their supervisees. These managers will also need to have at least 2 new employees that will be added

in the next hiring cycle in order to explore and compare employee development over time. Supervisors tracked for this study will be those who were not promoted internally into the position. This is due to the need to differentiate those who already have pre-established connections within the organization to those who need to build up their social network presence from the start. To avoid explanations relating to potential dynamics exclusive to a specific department, managers from any department will be recruited for this study.

The control group of managers will be randomly selected among managers from the organization. To ensure similar comparisons between managers, members of the experimental group will have at least one counterpart within the control group from the same department of the organization. As there is no guarantee that the random manager selected in the control group is undergoing any form of mentoring with their employees, managers will be asked to identify individuals whom they provide the most support toward. As with the experimental conditions, employees identified by the manager should be an external hire in order to observe the development of the employee's social network over time. While this control group will not undergo any training, managers and employees of these managers will still be asked to fill out their respective surveys.

Materials

E-Learning Modules

E-learning modules within this training will give short lectures on cross-cultural awareness, transformative leadership, and team-level culture development. These e-learning modules are available through the organization's internal knowledge management system and are accessible from any time and any place. To encourage engagement, managers participating in

this training are given 1-hour during company time to complete the modules. Training modules and topics have separate test banks that may be pulled from at any time to refresh knowledge via knowledge checks.

Leadership Style and Skills Questionnaire

A modified version of the questionnaire found in Sousa and Roucha (2019) will be utilized for employee evaluations of their managers and for manager evaluations of their employees. Employees will be asked to evaluate their supervisors on a 4-point Likert scale ranging from 1 – Not at all to 4 – Frequently, if not always. Item content will be related to how engaged managers were with employees, whether or not the manager demonstrated skills related to employee development (e.g., providing opportunities to apply training, feedback), personal perceptions of the manager, whether the employee believes the manager has influenced the team's culture, and whether or not the manager has positively influenced behaviors in employees.

Employee Development Questionnaire

The content of this questionnaire will be similar to the leadership style and skills questionnaires given to employees but modified to focus on perceptions of their ability to transfer training concepts into their interactions with the employees under them, perceptions on ability to influence the culture within the manager's team, and the perceived progress made by employees as a result of the support given. Managers will be given a questionnaire that allows them to detail career development opportunities pursued with supervised employees and outcomes related to those. Additionally, managers will be asked to detail the relevance of the various trained topics in their work when applicable.

Procedure

Managers will participate in a 4-week training focused on developing the competencies of cross-cultural awareness, transformative leadership, team-level culture development, and knowledge on organization resource groups. These training sessions will take approximately 1 hour on Day 1 for the lecture-based section of the training, 1.5 hours for Day 2 through 4 for the role-playing exercises, and up to 3 hours on Day 5 of the training to be evaluated on whether or not knowledge has been obtained by trainees. Week 1 is dedicated to cross-culture awareness, Week 2 is dedicated to transformative leadership, and Week 3 is dedicated to team-level culture development. Week 4 will be composed of two interactive workshops that familiarize trainees with available resource groups and teaches identification of influential individuals through digital markers. Upon completion of all topics, participants will be asked to complete a formative assessment containing items related to trained competencies.

The general structure of the training will have participants engage with an e-learning training for Day 1, consisting of four modules. During these modules, participants will finish occasional knowledge checks to maintain attention. At the end of the four modules, participants will be given two knowledge check questions to maintain participant engagement with training content. From Day 2 through 4, participants will engage in roleplay scenarios based on situations that have played out in the organization's past. Furthermore, situations that have occurred within the organizational spaces allow organizations to save on costs related to modeling the context of a given situation. On Day 5, participants will be asked to complete a 10-question multiple-choice quiz as an assessment to determine whether they have properly grasped the content of the learning modules and topics. Participants will pass this assessment upon gaining at least 70%

from the assessment. There is no punishment for retaking this final assessment on the topic; however, trainers will be informed of individuals who fail multiple times to schedule a meeting to understand what the trainee may be struggling with or why they may not feel motivated to engage properly with the training.

Upon the final evaluation given for the training, five data points will be collected at the 1-month, 3-month, 6-month, 1-year, and 2-year period through the surveys sent to managers, employees, and data gathered from interactions within the organization's enterprise systems. Additionally, employee involvement and contributions toward organizational goals will be recorded to observe the potential progression of influence within the organization over time. These data points will be utilized in the following analysis. Optionally, managers are able to refer to training content whenever, with engagement (e.g., answering knowledge check questions) being noted for potential explanations when evaluating differences in training effectiveness within employees.

Proposed Analysis

To determine the ability of managers to identify individuals with social network centrality characteristics and to provide evidence for those characteristics leading to better organizational-level outcomes, a pre-test post-test analysis will be conducted comparing data collected across the different timepoints previously specified to understand the long-term effects of this training on organizational outcomes (Schaie & Hertzog, 1982; White & Arzi, 2005). The groups compared will be the individuals who undergo the training for managers and a control group consisting of counterpart managers from the same division to allow for equivalent comparisons (Abbuhl et al., 2013). Comparisons between manager and employee perceptions of

manager involvement in an employee's development, the types of resource group interaction indicators and frequency of usage, and employee contributions toward the organization will be used to create a multi-layered perspective that reduces individual biases by pairing it with quantifiable data. The analysis will look at the level of employee-manager engagement, employee perceptions of the manager aiding in their development, and accomplishments or contributions toward the organization to see whether managers trained from our program consistently and significantly identify and develop future talent over their peers from the control group.

Strengths and Limitations

One advantage of this study is the use of various forms of information to determine whether our training is effective. Mainly, the variety of perspectives gathered (trainee and managers), and information gathered through digital exhaust left by employees gives us both quantitative and qualitative data to identify in what ways the training excels in its alignment toward organizational goals and in what ways the program may be improved upon. One large limitation is the proposed length of the training. The goal for the proposed time period is to determine whether the training is reliably able to change manager behaviors to focus on uplifting the employees under them. As the goal of the training is to develop mentorship skills in supervisors that help foster future talent, determining whether trained managers are reliably developing employees for future positions compared to the control group managers is crucial in determining whether this program deserves further investment. If the training is thought to be effective, then the organization potentially saves long-term costs based on employee turnover and the need to hire a replacement. Another smaller limitation is the chosen training's design and

methods heavily relying on technology that may be less familiar to older generations of managers. While the use of technology can be difficult for older generations, the training urges the need for the competency due to the omnipresence of technology for asynchronous communication in multi-national organizations.

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Appendix A

Sample Training Schedule

Monday	Tuesday	Wednesday	Thursday	Friday	
Module 1	Module 2	Module 3	Zoom Roleplay	In-Person Roleplay	Cross-Cultural Awareness
Module 1	Module 2	Module 3	In-Person Roleplay	Zoom Roleplay	Transformative Leadership
Module 1	Module 2	Module 3	Zoom Roleplay	In-Person Roleplay	Team Culture Development
	Workshop Session 1		Workshop Session 2		Organization Resource Workshop
Review Available Topics and Modules					Review Week
Asynchronously Complete Formative Assessment					Assessment Week