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Creating a Safe Environment for Women's Leadership Transformation

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Abstract

This study used qualitative data to describe how transformational learning was achieved in a women-only training (WOT) program. The article argues that an environment conducive to transformational learning for women was created from the harmonious coalescing of the presence of all-women participants and instructors with gender-sensitive teaching and learning practices. The integration of these elements created safety and participant willingness to break with habitual patterns. This article contributes to the transformational learning and WOT literatures by proposing a holistic explanation for creating safety and fostering women's transformational learning in training settings. It also develops an analytic framework that expands current conceptions of the transformational learning process.

Keywords

women's leadership development, transformational learning, women-only training, creating safe environments

As the number of women in all job categories has increased, there has been corresponding interest in cultivating women's leadership talent. Although cultivation of talent requires both organizational and individual change (Hopkins,

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O'Neil, Passarelli, & Bilimoria, 2008), this article focuses on individual change through transformational learning. A core assumption is that deep individual change is necessary for fundamental organizational change. That is, even if structural conditions change, unexamined and internalized gendered messages may still hold women back from developing their full leadership potential. Although I do not want to overstate this point, I believe that internal change is a critical aspect of fostering women's leadership growth. This study uses qualitative data from interviews of women who participated in the Women's Leadership Series (WLS), a formal women-only training (WOT) program of the Consultative Group for International Agricultural Research (CGIAR), to examine how internal transformation was achieved among women learners in this formal training setting.

According to Mezirow (1991), the transformational learning process consists of encountering a dilemma, making meaning, and achieving a transformative insight.[1] The process results in the alteration of habitual patterns and a fundamental perspective change that affirms identity and expands capacity (Kegan, 2000; Mezirow, 1991). Because deep change generates anxiety, transformational learning is more likely in environments perceived as *safe* (Edmondson, 1999; Mezirow, 1991). Kolb and Kolb (2005) suggest that safety is created by fostering an affirmative environment through social inclusion, honoring differing experiences, and coupling challenge and support. Winnicott's (1958) work puts relationships at the center of creating a safe environment for learning. Although transformational learning researchers view relationships as key to fostering safety, they do not fully explore the difficulties women have forming growth-enhancing relationships in formal training settings.

In contrast, the WOT literature emphasizes the ease with which women form relationships, the sharing of gender-related concerns and experiences, and the use of teaching methods that focus on self-discovery (Vinnicombe & Singh, 2002). However, this literature does not go beyond these characteristics to explain how these elements combine to create safety for learners. This article addresses the overall question of whether and how transformational learning can be achieved for women in formal leadership training settings. Specifically, it seeks to identify how a safe and affirming learning environment can be created for women in WOT settings.

The findings of this study demonstrate that, in the WLS, conditions favorable for transformational learning were created through the coalescing of two elements: presence of all-women learners and the use of gender-sensitive teaching and learning practices. These findings lend support to prior research on transformational learning, which indicates the importance of the coming

together of environmental, learner, and instructor elements (Carson & Fisher, 2006; Choudhuri, 2008). In the WLS, the presence of an all-female environment was accompanied by teaching and learning practices that exemplified the mutually empathetic qualities inherent in what Fletcher (1998, 1999) called relational practice, and these were found to be important to women's classroom learning (Buttner, 2002). These practices fostered safety and participant willingness to suspend habitual patterns. Another contribution is in expanding the framework of transformational learning by including an additional stage to the three stages identified above, along with four preconditions for transformational learning.

The next section describes barriers to women's leadership effectiveness in organizations. This is followed by a description of the transformational learning process, the role of relationships in enabling it, the difficulty of cultivating growth-fostering relationships for women in mixed-gender settings, and the argument in favor of WOT for transformational learning. Next, the research methods are discussed, followed by the analytic framework resulting from data analysis. The findings section, composed of five subsections, illustrates this framework. The final concluding section discusses the contributions and implications of the analysis.

Navigating Gender Dynamics

Gender reflects a socialization process that begins at birth (Chodorow, 1978; Miller, 1986). This process inculcates a masculine identity and worldview for men and a feminine one for women (Gilligan, 1982; Lorber, 1994). These orientations are deeply embedded in societal culture, such that members view them as inherent to the sexes (Lorber, 1994). Although there are different types of masculinity and femininity, an ideal type within both domains shapes cultural narratives (Ashcraft & Mumby, 2004). The ideal feminine involves nurturing and serving others whereas the ideal masculine involves agency and individual achievement (Miller, 1986). Although individuals rarely embody the ideal for their sex, men are expected to and typically exhibit masculine behaviors whereas women typically exhibit feminine ones (Miller, 1986, 1991).

Organizations' formal procedures and informal interactions favor masculine behaviors and men's life situations (Acker, 1990; Bailyn, 1993; Ely & Meyerson, 2000; West & Zimmerman, 1987). For most men, the career is a central life preoccupation that progresses in an upward trajectory (O'Neil & Bilimoria, 2008). For women, careers are constructed in a fluid balance between private and professional roles, resulting in widely differing career

trajectories (O'Neil & Bilimoria, 2008). Women face pressure in balancing work and life demands since they still have primary responsibility for household responsibilities (Lorber, 1994). This limits their participation in career-critical networking opportunities (Catalyst, 2004). Many women compensate by developing parallel networks—with other women for support and with men for instrumental benefits (Brass, 1985). Unfortunately, women's efforts to manage the incongruity between organizational practice and their multiple roles is seen as evidence that they are not serious about their careers and not that organizations have failed to adapt to their needs (Vinnicombe & Singh, 2003).

As women advance into leadership roles, they face challenges exercising leadership. Consistent with societal gender-role expectations, they are expected to exhibit feminine behaviors, but when they do, they risk being regarded as ill-suited for leadership (Eagly, 1987). Women not only learn that feminine behaviors restrict their career mobility but also experience pressure to conform to organizational role expectations. However, when they respond by adapting masculine behaviors, they violate gender-role expectations (Eagly & Carli, 2007). Thus, women are seen as weak and incompetent, or rendered invisible if they enact feminine behaviors, but seen as unfeminine if they use masculine ones (Catalyst, 2007; Meyerson & Fletcher, 2000).

The conflict between societal and organizational expectations can reflect tensions between espoused beliefs that women can do men's work and actual concerns that they may not be suitable for it. Research on women's work experiences demonstrates that this tension is not isolated to a particular country. For example, Lahiri-Dutt and Macintyre (2006) examined women's participation in mining activities in several Asian, African, and Latin American countries and found that one way women were allowed to work in this nontraditional occupation was by means of policies that barred them from "masculine" jobs (e.g., disallowing women from doing underground work). Although such policies opened doors for women in mining, they also created job segregation based on societal gender-role divisions and helped affirm the idea that women are fragile and not suitable for "masculine" activities. Similarly, a study in the United Kingdom (Priola & Brannan, 2009) found that women's managerial career progress involved navigating a thicket of gendered assumptions and practices that are linked with characteristically feminized expectations and behaviors. A study in Sweden examined how early career professionals in two master's-level programs—psychology and political science—navigated gender to gain legitimacy in relation to their colleagues and clients (Nyström, 2010). This study identified differing strategies among men and women and

concluded that these differences reflected responses to gendered expectations within the two professions. Although the above-cited studies are not exhaustive, they point to a theme of conflicting expectations for women in "masculine" professions and the importance of navigating these expectations as a key part of women's leadership effectiveness.

Conflicting expectations of women produce organizational resistance to their leadership (Maddock, 1999). Some women cope by avoiding senior roles (Maddock, 1999). Others struggle to make changes in their organizations consistent with their values (Blackmore, 1999), fostering collaboration in project teams (Fletcher, 1999), and seeking work–life balance (Stone, 2007). In addition, many professional women want to succeed in their families as well as in their careers but often have to choose between these aspirations (Stone, 2007). Many women also desire genuine connections with others at work but, in the competitive culture of organizations, this desire is perceived as naïve or weak (Fletcher, 1999; Stiver, 1991). Internal conflict also arises from unconscious investment in the idea that women are weak and need strong men (Miller, 1986). This notion leads women to underestimate their competence, avoid risks, and shun visibility (Stiver, 1991).

At any point in time, women draw on whatever resources they have to navigate the landscape of gender norms and expectations despite the structural bias against their success (Eagly & Carli, 2007). The constant vigilance that this requires can be cognitively and emotionally taxing, leaving little room for deep and meaningful learning about one's capabilities as well as weaknesses and for figuring out how to manage external demands in a less depleting and more empowering way (Maddock, 1999). Apprenticeship in an occupation, profession, or job begins early such that the gendered expectations of a community of practice become part of one's identity (Tanggard, 2006; Van Den Brink & Stobbe, 2009). Thus, changing one's current way of navigating gender is far more profound than learning techniques and skills. It involves identity reconstruction, a process of choosing who you want to be and resisting external ascription based on gender or any other social identity (Bennis, 1989). The task of reconstructing identity in consonance with personal values coupled with the task of understanding the context so as to navigate gender is, by any measure, challenging. Instead of seeking a one-size-fits-all solution, leadership development activities can be most effective when they enable individuals to understand themselves (values, strengths, and motivations) and their contexts (nation, profession, and organization) so that they may address issues unique to them and take small steps in their development as leaders (Le Feuvre, 2009).

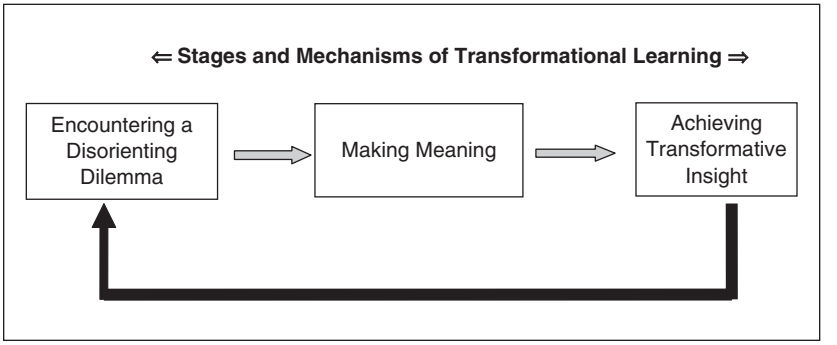

Figure 1. The process of transformational learning

Cultivating Transformational Learning for Women

This section describes the transformational learning model. It then considers its applicability to a classroom setting, with a focus on women learners.

Transformational Learning Process

Mezirow (2000) describes transformational learning as a "movement through time of reformulating reified structures of meaning by reconstructing (a) dominant narrative" (p. 19). As seen in Figure 1, transformational learning unfolds in successive stages: encountering a disorienting dilemma, making meaning, and achieving transformative insight (Mezirow, 1991). A disorienting dilemma occurs when an individual's habitual thought pattern is disrupted by a disconfirming event. The individual pauses in her automatic response, discerning that a connection exists between this automatic response and problematic outcomes. This awareness creates disorientation because, while a new direction is not easily apparent, going back to old ways is no longer tolerable.

Meaning making involves a search for new input from a wide variety of sources, including theory, conversations with others, and observation. Eventually, a coherent idea or transformative insight emerges resolving disorientation and creating purposefulness. Even if it may be some time before a learner is willing to act on new insights, the transformative insight has a powerful effect on future perception, thought, and feeling (Clark, 1993). This

in turn can result in the refining of insight or the emergence of new disorienting dilemma.

A cognitive shift called the *transitional state* is crucial to progress from disorienting dilemma to meaning making. A transitional state involves the suspension of habitual patterns of perceiving, thinking, and acting accompanied by receptiveness to new possibilities (Winnicott, 1989). This state emerges when the individual feels safe (Edmondson, 1999; Winnicott, 1989). Winnicott's (1989) notions of holding environment and transition object help us understand how psychological safety is created.[2] The holding environment refers to the social interactions and learning resources assembled in a particular place for the purpose of fostering learning and growth (Rogers, 1970). This place is simultaneously a part of and apart from the larger contexts in which it is embedded (e.g., family within a community, work group within a division, and classroom within a school). What makes a holding environment a place potentially conducive to learning is that it offers members a sense of belonging and acceptance along with opportunities to explore new ideas and skills in an environment of challenge and support (Van Buskir & McGrath, 1999). The aim is to help learners take risks in a safe environment so they may develop the capacity to handle the demands, challenges, and pressures of the external environment.

The learner's competence grows through a process of attachment, exploration, and independence from transition objects, calming relational entities that the learner attaches to in the early period of mastering a task (Van Buskir & McGrath, 1999). As the learner feels more confident in his or her abilities, the need for support and comfort wanes, and this transforms the learner's relationship to the transitional object. Although transformational learning theorists view relationships as key to the construction of a holding environment, they do not adequately explore the difficulties that women have in forming growth-enhancing relationships in formal leadership training settings.

Transformational Learning in Formal Training

The leadership development literature identifies four outcomes for learners: knowledge acquisition, skill acquisition, self-awareness, and perspective change (Velsor, 1998). Knowledge and skill acquisition are common outcomes, but these leave habitual patterns of thinking and acting unchanged. Transformational learning would require an interruption of these thought patterns along with the identification of new possibilities. This is likely where

all four outcomes come to bear on a disorienting dilemma—where knowledge is deployed to understand a practical problem faced by the learner, fostering reflection on the learner's habitual patterns of thinking and acting, thereby cultivating deep reflection, increased self-awareness, and fundamental perspective change. The question is how the conditions for transformational learning can be achieved in a classroom.

As just mentioned, transformational learning can only be invited by creating a safe "holding environment." To achieve this in a classroom setting, learners must feel accepted and respected, challenged and supported, and have the resources they need to work through the disorienting dilemma (Kolb & Kolb, 2005). Inclusive settings encourage learners to engage with texts from the point of view of their unique personal experiences. Challenge is necessary to foster critical thinking, respect differences, and to expand perspectives. But challenge is coupled with support to resolve a disorienting dilemma. Supportive relationships are built on conversational practices that convey mutual respect and acceptance in the context of differences (Baker, 2002). The goal is to create conditions in which learners will put down their defenses, suspend habitual patterns of perceiving, thinking, and acting, and become receptive to new possibilities.

However, as Tanton's (1992) evaluation of three types of groups—all male, majority male, and gender balanced—reveals, societal and organizational gender norms also creep into the mixed-gender training setting, making it difficult to meet the conditions for classroom safety for women. Although women were not physically present in the all-male group, male bonding was partly achieved through what Tanton called the "debasement" of women. In the majority-male group, gender differences were denied by both males and females. Although women participants acquire knowledge and skill in this setting, they also feel something is missing. Concerns include women's differing career paths (Hopkins et al., 2008), lack of attention to ethical issues, emphasis on instrumental goals and rationality, and narrow definitions of success (Vinnicombe & Singh, 2003).

Balanced groups are rare in management training but seem more promising in terms of the inclusion of women's experience. For example, Tanton (1992) found that, in the balanced group, men and women expressed their differing experiences, there was intergroup dialogue, and little tolerance for dishonoring women's experience. Baker (2002) describes a similar dynamic in conversations about diversity in a classroom balanced in terms of identity dimensions of race, gender, nationality, and ethnicity. Therefore, demographic balance can contribute to inclusion of women's experience but may not be sufficient to facilitate transformational learning.

In light of this, some researchers advocate a WOT setting where participants can be free from gender-related constraints to fully explore their experiences without feeling the need for suppression or explanation (Limerick & Heywood, 1993). Researchers identify some key characteristics of WOT settings. Effective WOT programs are designed with women's learning methods in mind. The instructor and other participants can serve as "midwives," eliciting women's experience and offering their resources to facilitate self-discovery in supportive and challenging relations (Vinnicombe & Singh, 2003). Women are also encouraged to discuss issues that are salient and relevant to their lives and organizational experiences. Such issues include work–life balance, authentic self-expression, competition and conflict, and managing gender in these and other aspects of women's organizational lives (Vinnicombe & Singh, 2002, 2003). In addition, attention is given to exploring how the gendered structures of organizations affect women's work experience and leadership (Hopkins et al., 2008). As in most other leadership training settings, WOT programs use a variety of self-assessment tools to increase self-knowledge (Vinnicombe & Singh, 2002, 2003). Critically, WOT programs bring women together making it possible for participants to learn from one another's experience and have their own experiences affirmed.

For many women, being in an all-female environment is both rare and affirming, immediately putting them at ease. For example, when Willis and Daisley (1997) asked women to describe their experiences of WOT, the vast majority said they felt more able to express their views freely, confident, trusting, able to take risks, and willing to speak up in a large group. Participants in WOT also describe the invaluable lessons gleamed from collective wisdom and experience of other women.

Although the WOT literature does not explain how these reactions are engendered by the characteristics of WOT, the single-gender education literature proposes an interesting explanation. Here, the research suggests that creating safe learning environments for women requires a *holistic* approach. This means that every aspect of the environment, including the content of learning, teaching methods, values, norms of interpersonal relationships, affirm and reflect women's experiences and values (Meehan, 2007; Tidball, 1973).

This explanation harkens back to Winnicott's (1989) notion, identified above, of creating a holding environment. The long-term nature of a learner's membership in the single-gender setting and the comprehensiveness of the learner's experience in this setting would presumably make the task of cultivating such an environment easier. However, given the short-term nature of training, a question arises whether it would be possible to create an environment

that holistically and credibly affirms women's experiences in a training setting. And, if it is possible, how do the key characteristics of WOT work together to foster safety? Drawing on qualitative data from the WLS, this article will provide some insight into these questions. These data will be presented after the research setting and research methodology are described in the next section.

Research Setting and Method

The CGIAR is a strategic alliance of scientific organizations whose goal is achieving sustainable food security in developing countries. The alliance is composed of private foundations that support 15 scientific research centers and international and regional organizations. The WLS was launched in 1995 to help women scientists in the CGIAR overcome leadership and management challenges and build strong networks with each other. The instructors of the two WLS courses—Women's Leadership and Negotiation Skills for Women—concurred that women often underestimate their capabilities because they have grown up in patriarchal societies that erode their confidence.[3] Thus, although WLS courses are similar in content to management and leadership courses in mixed-gender settings, instructors were sensitive to women's unique experiences.

WLS participants were selected by their respective research centers in recognition of their performance and contributions. At the time of this study, more than 300 CGIAR women had participated in the WLS courses, and 24 alumnae (or 8% of the total WLS alumnae) were interviewed for this study. These individuals took the WLS course between 1995 and 2005, and all but 4 of these years were represented. Alumnae came from 12 of the 15 research centers comprising the CGIAR and were located at different levels of the CGIAR system (headquarters, regional, country-level). Many nationalities from six regions of the world were represented. These regions were East Asia and Pacific (25%), North America (20.8%), Europe and Central Asia (25%), Sub-Saharan Africa (12.5%), South Asia (4.2%), and Latin America and the Caribbean (12.5%). Research centers in the Middle East and North Africa were not represented in the sample. Finally, the interviewees' positions were classified as scientist/researcher (25%), scientist and program or theme leader (20.8%), theme leaders (16.7%), manager (16.7%), technician (8.3%), other, including a variety of administrative functions (12.5%).[4]

Information on the study was sent out by the Gender and Diversity Program Leader. Those who were interested in participating in the study were encouraged to take a web survey. Respondents were given information

on the study, asked for demographic information, general information on their jobs, and to indicate their willingness to participate in an interview study. Those that agreed to a follow-up interview were immediately contacted. In addition to WLS alumnae, the two instructors of the Leadership and Negotiation courses were also interviewed. Once consent forms were signed by all interviewees and received by the researcher, interviews were scheduled. These interviews were conducted by telephone because alumnae and instructors were located in different countries. Two interviews were conducted in person.

Before the interview started, I reiterated the purpose of the study and gave interviewees an opportunity to raise questions. The phone interviews averaged 2 hours each, although they ranged from 1 hour to 4 hours. Participants were also informed of the steps taken to ensure confidentiality and anonymity by maintaining all-electronic records and disguising any identifying information in descriptions.

Interviews with alumnae elicited leadership stories that explored the leadership experiences of alumnae before and after the WLS. They also examined the critical learning that occurred during the WLS, how it occurred, and whether insights from the course affected future behavior. Participants' recall of the events of the training was vivid and full of nuanced feelings about the teaching and learning practices that had been critical in achieving insights. Since WLS alumna participated in training at different points in time, there would undoubtedly be event-specific processes that might be important. More important, however, I was interested in whether there were teaching/learning processes that enabled transformational learning. This is a question about the nature of the WLS settings. The following are the types of questions that I used to elicit information on this issue: Was there anything from either your 360-degree feedback—your self-assessment or the feedback from others—that was important and stayed with you? If so, what was it? Were you able to gain insight into how to improve in the leadership areas identified as needing attention from the 360-degree feedback? Was there a memorable moment in the WLS—either something that happened in the class or something that happened outside the formal class—that was a significant learning moment? Numerous specific questions followed these questions to elicit details and to fully explore the participant's experiences, views, and meanings.

The analytic procedures of grounded theory methodology were used to reduce the data and to identify core themes (Glaser & Strauss, 1967). Qualitative data analysis took place both during and after data collection, collection and analysis of the leadership stories being concurrent processes. Immediately after each interview, I summarized the interviews and wrote up

leadership stories. Leadership stories contained information on pre- and-post-WLS leadership experiences as well as the key learnings that occurred during the WLS. Along with this activity, I also identified initial analytic codes—labels that link data to thematic categories—and wrote theoretical memos, identifying issues and questions that needed to be explored in subsequent interviews (Bogdan & Bilken, 1998; Emerson, Fretz, & Shaw, 1995). Although all regions, centers, and years were not represented, I decided to stop at 24 alumnae interviews because, after preliminary analysis of 17 interviews, additional interviews did not yield new theoretical insights. Thus, I was satisfied that data saturation had been achieved.

After data collection, I read and re-read the interview transcripts. The leadership stories written at the end of each interview were elaborated with data from transcripts, and new stories were added as these were identified. Then, portions of the leadership story that related to learning experiences were extracted for closer scrutiny. These extracted data narratives addressed the conditions that were attributed by learners to the change described from their pre-WLS to post-WLS leadership stories. I then read through this bracketed data to identify themes and subthemes. In this way, I arrived at the analytic themes discussed in the next section. Once these themes were identified and data reduced into the relevant categories, the data were subjected to line-by-line coding.

In quantitative research, rigor is assessed using established procedures for assuring reliability and validity. Although the reliability criterion is not meaningful for interpretive, qualitative research, the validity criterion is critical in assessing the trustworthiness of a qualitative study (Bogdan & Bilken, 1998; Creswell, 1998). Lincoln and Guba (2005) propose four criteria for assessing trustworthiness: credibility, dependability, confirmability, and transferability. In this study, credibility and confirmability were sought through member checks and expert reviews. Member checks were performed by five individuals within the CGIAR, some of whom were interviewees; others were individuals that were very familiar with the CGIAR and the Gender and Diversity (G&D) program. Experts included colleagues who were gender researchers. Dependability was sought by providing detailed description of the research procedures so that readers can assess the adequacy of the methodology.

Analytic Framework

One theme of this research relates to the stages of transformational learning. As indicated in Figure 2, WLS alumnae described going through all the stages

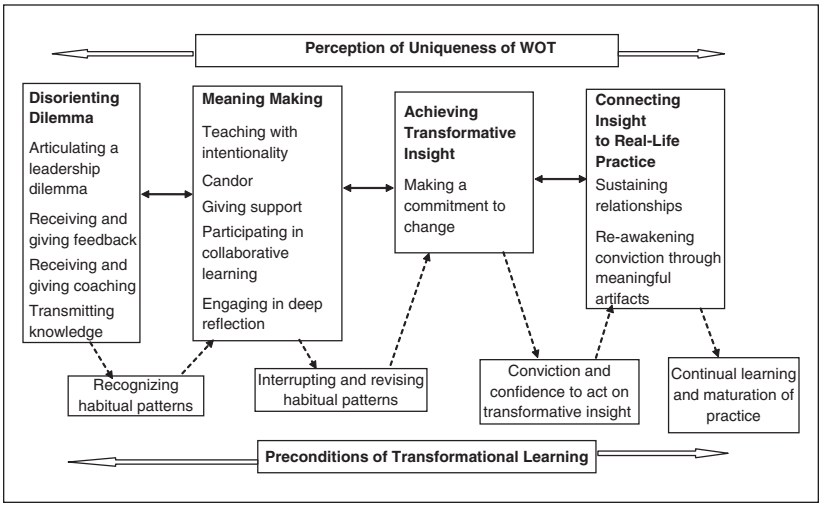

Figure 2. The teaching/learning processes in women's leadership transformation
Note. WOT = women-only training

of transformational learning identified in the literature: encountering a disorienting dilemma, making meaning, and achieving transformative insight. Additionally, they described a fourth stage of connecting insight to real-life practice. Additionally, there was what I call *preconditions of transformational learning*. These refer to a shift in learner focus and attention when the work of one stage of transformational learning is completed and the work of the next stage begins. Four preconditions were identified: recognizing habitual patterns, interrupting and revising habitual patterns, conviction and confidence to act on transformative insight, and continual reflection on practice. Finally, as depicted by the two-way arrows in Figure 2, the transformational learning process has the potential of being ongoing and cyclical.

Another theme was that the WLS was a unique setting. One aspect of uniqueness had to do with the feeling of belonging and acceptance from being in an environment where one's experiences and feelings are shared. Being in an all-women environment was not sufficient to make the WLS setting feel unique to participants. Another aspect of uniqueness was that participants felt cared for and respected by others in their learning process. Specifically, WLS alumnae described a number of teaching and learning practices in interactions that they felt were appropriately challenging but always supportive and helpful enabling each learner to discover her strengths

and what she needed to do to grow. The uniqueness of the WLS emerged from the harmonious coalescing of the women-only nature of the course and gender-sensitive teaching and learning practices among participants and instructors. These practices, listed in Figure 2, appear within the transformational learning stages where they were prominent in the data. These practices are articulating a leadership dilemma, receiving and giving feedback, receiving and giving coaching, transmitting knowledge, teaching with intentionality, candor, giving support, participating in collaborative learning, engaging in deep reflection, making a commitment to change, sustaining relationships, and reawakening conviction through meaningful artifacts.

Findings

In this section, I use data from interviews with WLS alumnae to illustrate the themes and subthemes of the data analysis, also depicted pictorially in Figure 2. (The names for individuals in this presentation are disguised.) The presentation centers on describing why the WLS was experienced as "unique" by learners. Something is said to be unique when it stands out in contrast to ordinary, everyday experience. As explained by WLS alumnae, the WLS was unique because participants felt they were free from having to be vigilant and in a constant mode of navigating gender. Two things appear to have been important to creating this type of training environment: the all-female environment and the use of gender-sensitive teaching and learning practices. Consistent with Figure 2, these gender-sensitive teaching practices are depicted within each stage of transformational learning. Therefore, they will be described here in four subsections pertaining to the stages of transformational learning: encountering a disorienting dilemma, making meaning, achieving transformative insight, and connecting insight to real-life practice.

Being in an All-Women Environment

Most of the WLS participants noted that the WLS setting was unique, a theme identified by other researchers (Limerick & Heywood, 1993; Willis & Daisley, 1997). One aspect of uniqueness had to do with the feeling of recognition, belonging and being accepted from being in an environment where one's experiences and feelings are shared. This was very significant for WLS alumnae who were generally isolated in their research centers. One participant, Stella, described it this way: "A lot of the women in the group I was with said they felt that they were all alone in their center and nobody else had

these problems, and here they came and ran across a whole bunch of women having very similar problems."

Several WLS alumnae said that they sensed that they were in a unique setting almost immediately. For example, Meeta described "recognition" arising from the awareness of shared experience when participants first introduced themselves:

> We had participants from all the continents—North America, South America, Africa, Asia, Europe, and the Middle East. We came from very different backgrounds and cultures, but the first day when we talked about ourselves, I could already see the similarities, especially in problems that we face as women leaders and managers. So, that is something that actually struck me on the first day.

Another aspect of uniqueness arises from openness and self-disclosure. Eko cited a "personal history" exercise, on the first day that put her at ease:

> Even before the course started, we had lunch together. The way the women approached everybody was so great—nobody was shy. You just introduce yourself and everybody *listens* to you and appreciates your story. All the participants were so open, so frank about their feelings. I had many good conversations with many people who listened to my stories and they told me, you know, "I relate to you. When I was young, this is what happened to me. This is how and why I solved the problem as I did." I got many, many good experiences from other people, and in all aspects—the professional aspects, the personal aspects—because I wanted to know, you know. I asked all the ladies there, "So, are you married? How do you deal with that? Did your husband follow you? Did you have to follow him? How did that happen? How are you now in this top position? Are you happy?" Things like that. And I asked almost everybody these questions, and I got a really good grasp of what is it to be on the top, being a professional, being a mother, everything. If I want to follow that life or not, very useful.

The absence of power play was also noted and seen as an important factor in promoting openness and sharing. In the next quote, Zena describes this in the context of one of her team members:

> There was a board chair there. She was obviously a highly connected, powerful person, but she was really open about the sort of issues she faced as one of the only female board chairs at that time and working in a predominately male center. She never would have done that in a mixed-gender situation. She instantly felt comfortable. She wasn't speaking to us as "I'm the board chair and you're just whatever." She was speaking as a person. I think women tend to be less conscious of their levels of influence. At least in this context, she certainly was . . . And I think that in a mixed situation, you would never have that level of honesty.

A third and related aspect of uniqueness was the willingness to broach gender-related concerns, concerns that women find threatening to raise in mixed-gender settings for fear of being seen as weak or uncommitted. This was directly attributed to the all-female nature of the setting. Being freed up to talk about these concerns enabled women to hear from others that they had valid concerns and that their experiences were shared. Once this occurred, it opened the door for deeper learning. For example, Sassa stated,

> I've been through lots of management courses, and I've been through management courses with women and with men. The lessons aren't particularly different, but because we're a minority, we have issues that men don't have in terms of family and being a minority. I think that you can create an environment of trust and understanding——with women, it happens almost immediately—people start sharing things almost immediately, but when you're with men, you don't have that kind of environment where you can share things—We can learn a lot of things in a training course with men, but you're not going to be dealing with issues that are specific to your gender, and you're not going to be as open to sharing.

Several interviewees shared similar views. For example, Bontu stated, "I remember the unbelievable feeling of spending a week in a room with only women, the first time in my life—it was quite overwhelming for me . . . The level of energy, the level of camaraderie—I remember being so relaxed in my learning." People who had initially been unsure about the value of being in an all-female environment, like Indra, had a different perception after the course:

> We had a very open exchange and sharing of feelings and stories. Before the course, I questioned, "Why a women's course? Men also need this type of training?" But after the course, I said, "Yes, it was

> right." If we would have had men, we women probably wouldn't have been so open.

Being in an environment where it was possible to exchange experiences and learn about how to navigate gender was not only rare for WLS alumnae, but also short-lived. After 1 week everyone had to go home, and the good-byes were emotional. Perhaps leaving an environment where one's total experience was affirmed to go to one in which self-censorship was a matter of survival was difficult. Rebecca reflected on the last day:

> From feedback of participants on the last day, we can see that some of them really appreciate the course. On the last day, when we shared our learning experiences, it became very emotional. There was one person who admitted she was a very logical person and not emotional—she also got emotional. She said that this is supposed to be a professional management and leadership course but here we are, all of us, getting so emotional about the whole thing. Even then, I was thinking that it really is a very unique experience for a leadership and management course.

In sum, one aspect of the perception of uniqueness came from being in a women-only setting. At least three conditions were related to this. First, there was recognition of shared experience along with a sense of belonging and acceptance. Second, participants felt they could open up and share without fear of rejection or negative self-presentation. Finally, there was a sense of freedom to talk about gender-related concerns, concerns that are typically risky to address. This last item is critically important to women's learning. The denial of gender as an experience—by others in the environment and then by the self—denies women of self-awareness and self-knowledge (Spender, 1982). This in turn inhibits their understanding of the context, and all this conspires to prevent women from addressing the gendered nature of their position in organizations. As described by Bennis (1989), the denial of insight about oneself is a major handicap to learning and transformation; it is also a handicap to the individual's ability to master her context in ways that are congruent with her sense of self.

Being in an all-women environment was full of potentialities for learning, but it was just one piece of what was involved in creating an environment for transformational learning. The potentialities of this "unique" setting had to be realized through what participants did in relation to the issues that came up during the training. What WLS alumnae did is manifested in the teaching and learning practices listed in the four stages of transformational learning

depicted in Figure 2. These practices are articulating a leadership dilemma, receiving and giving feedback, receiving and giving coaching, transmitting knowledge, teaching with intentionality, candor, giving support, participating in collaborative learning, engaging in deep reflection, making a commitment to change, sustaining relationships, and reawakening conviction through meaningful artifacts. As illustrated in the following subsections, these practices provided challenge and support to each learner, enabling her to complete the tasks involved in each stage of transformational learning.

Disorienting Dilemma

The first box of Figure 2 contains practices that triggered a disorienting dilemma in the stories of WLS alumnae. The following story demonstrates how feedback from peers and a 360-degree instrument were pivotal to the articulation of Rosaria's leadership dilemma:

> Toward the end of the course, we had a session where we had to give feedback to every member of our team on general behavior and performance during the training. So I really spent time the night before writing feedback to every one of the team members. Trying hard to recall their faces, their actions which struck me most, and then the words that they told me that struck me most. I really spent time. They found my feedback to be the most insightful. It was a surprise to me because I felt, "Oh, would they appreciate it?" But I also felt I deserved that appreciation because I really spent time thinking about this feedback. And then, it turned out that a number of them, they found me quiet, and they had a hard time writing feedback for me. They couldn't find anything to say about me. Someone told me that, "actually, your being quiet is your strength"—I was struck by that phrase—"because your quietness actually gives you the time to really think through things, to really help you in making insightful comments." They said, "You have all those thoughts inside you. You just have to bring them forward." I still remember those phrases. And actually, it's a good feeling, because it gave me the confidence that what I'm thinking is right. I just need to express it. I just need to articulate it. This one thing is maybe one of the most memorable moments in the leadership training.

Feedback from her colleagues at work, however, was less neutral. One comment from the 360-degree instrument was that she was "unimaginative." Rosaria reflected,

> I consider myself imaginative, but apparently, it doesn't show to others. The reason, I think, is because whenever I have ideas, I just keep it to myself. I don't spread it; I don't articulate it. I have a tendency to keep quiet. And I think it's because, whenever there's a new idea, I'm too careful to really think about it and to plan about it. I'm afraid it might not be a popular idea.

Rosaria became aware that her behaviors were driven by the fear of harming relationships, a characteristically feminine concern (Miller, 1986; Stiver, 1991). In organizations where assertive verbal communication is valued, evidence of competence that comes in nonverbal forms can be invisible and ignored. Rosaria's group members helped her to recognize her abilities and understand how her silence was interpreted in the masculine context of her workplace. Rosaria's group also supported and strengthened her, encouraging her to show her abilities verbally.

Encountering a disorienting dilemma leads to recognition of habitual patterns, the first precondition for transformational learning. This precondition is met when an individual sees an aspect of her behavior that was previously unrecognized. In the transformational learning process, this recognition motivates meaning making, the second stage of transformational learning. It is important to note, however, that encountering a disorienting dilemma does not always lead to the recognition of habitual patterns. In fact, as Argyris and Schön (1974) have shown, most individuals are socialized to respond to disconcerting information defensively, shielding themselves from recognizing their habitual patterns. Thus, the presence of accepting and nonthreatening others can be critical in enabling a learner to achieve the first precondition.

Meaning Making

The teaching and learning practices listed in the second box in Figure 2 facilitate meaning making. Beatrice's story illustrates several of these practices in an effort to resolve a preexisting leadership dilemma. Her pre-WLS leadership story had to do with overcoming isolation as the leader of a new, system-wide initiative. Despite her best efforts to interest and engage key decision makers in the activities of her initiative, only a handful responded enthusiastically. A second group of constituents responded negatively, and a sizeable third group was simply silent with a "wait and see" attitude. During the WLS, she was presented with a theoretical model identifying three types of stakeholders: allies, opponents, and fence sitters.[5] In the quote below,

Beatrice describes how this theory enabled her to frame and thereby articulate her dilemma:

> I remember during the course when this model of allies, opponents, and fence-sitters, was presented—I just had this light bulb go off in my head. And (I said): "That's what I'm facing!" I immediately pictured all of those (constituents) in those three categories—I could immediately place them, in my head.

Once Beatrice was able to do this, she became interested in exploring the implications of this theory to her leadership dilemma more deeply. She did so in one-on-one coaching with instructors and in supportive interactions with workshop participants. As Beatrice explains below, in these interactions, she learned a lot about what would and would not work in the unique culture of her organization. Most significant, she learned that her relational style of trying to engage each key stakeholder personally was more effective with allies than with opponents and fence-sitters. The latter two stakeholder groups, she concluded, would more likely be responsive to impersonal data and information:

> Once I had (the model in mind), I thought, okay, here are my allies. Here's who I can turn to for support and where I can deliver, right away, and start having results. For the others, I concretely thought about their information needs, and then I started thinking about how I could move fence-sitters and opponents into allies, but that was going to be a longer-term effort. I was first going to start with my allies.
>
> I wasn't taking the easy way out—it really was the right thing to do. And yet to make sure I gave concerted effort, giving information to the others and trying to understand what kinds of information would make them happy. And that's when I became very data driven, recognizing the culture of the organization and doing lots of survey work and hitting them with data, more data . . . I never stood up and talked theory, although gender and organizational theory is so interesting to me . . . I present our own facts and figures and trends and challenges. So, I think the leadership course helped me understand that I needed to run a fact-driven program.

Beatrice's story is an example of how theory that is supposedly gender-neutral is interpreted in a gender-sensitive manner. Beatrice used the tripartite model of allies, opponents, and fence-sitters to help her understand the

different types of responses she got from her constituents and how her approach with all of them had been relationship building—a posture she later concluded was appropriate with allies. She also realized that she, like most women, preferred to exercise influence through a relational strategy. Through her interactions with workshop participants and personal reflection, she concluded that she would have to adopt other strategies to match the needs and expectations of her constituents as well as the culture of the organization itself. She decided therefore that she would have to learn to use impersonal influence methods that are more commonly associated with masculinity. Once again, the interpretation of Beatrice's dilemma required a nuanced understanding of gendered dynamics, namely, her relational approach and situations in which it was incongruent with organizational practice.

The meaning-making process results in new insights and enables the learner to envision new possibilities. These new possibilities make it possible to interrupt and revise habitual patterns of seeing and thinking. When this occurs, the second precondition of transformational learning, interrupting and revising habitual patterns, is achieved. In cases where learners or learning partners adopt a defensive posture in their interactions, meaning making is derailed and this precondition is not met. But, when this precondition is successfully met, it leads to the third stage of transformational learning—achieving transformative insight.

Achieving Transformative Insight

At some point in the meaning-making process, a coherent idea emerges that suggests a direction for action. The transformative insight achieved by one group of WLS alumnae primarily involved challenging internal assumptions about themselves, as persons who lacked valuable ideas and could not effect change. Claudia falls into this category. Before the WLS, she said she hid behind others:

> If I had a good idea, or if I felt we should do something, I would not come out alone as the one suggesting it. Instead I would ask somebody else 'What do you think?' . . . and then I would step back because I didn't want the idea to come from me.

Reflecting on why she did that before the course, she said that she felt she was a "nobody." She continued: "I got very good feedback on my performance, but I saw it as—'it's not me. I'm not doing this. It's my good boss,

I am just supporting her.'" The turning point for her was when these beliefs were challenged by the feedback from WLS alumnae. She said,

> If everyone in the course can see something of value in me, then there must be something in me that I am not seeing, that I need to be more aware of. I saw how well things have worked out, I saw that I am the one who is doing this and this and that. I have some leadership skills that I need to appreciate more.

The transformative insight achieved by another group of WLS alumnae involved challenging assumptions concerning relationships. Some in this group, similar to Beatrice above, were limited in their overreliance on relational considerations while others similar to Ana were limited by overreliance on task considerations. Ana said,

> I developed training materials with my team. I was under a lot of pressure. Members on the team would not get their parts done on time. I would get frustrated and do it myself. For me it was "let's get it done, with the highest quality." But I was not giving team relationships the value they needed.

When she came to the WLS, her relationship with her team was suffering. During the WLS, her group had to do some experiential exercises related to team work and then reflect on what worked and what did not. This discussion was framed by a theoretical model of leadership and group development that highlighted the leader's role in managing the group's task and relational demands. Learning about this theory was a significant turning point for her. She realized that her difficulty with her team lay in her total disregard of their relational needs.

A third and final group of WLS alumnae came to the training with a clear sense of and commitment to their personal values. They said the WLS courses affirmed their values and strengthened their resolve to live by them. The value put on independent accomplishment in Alexandra's center made her question her preferred collaborative approach, but the WLS course gave her assurance that her style was a strength and not a weakness, affirming her commitment to collaboration:

> The course confirmed that what I did intuitively before the course is not a weakness. Now I have it very clearly in my mind that it's a strength, that I have this emotional intelligence. A lot of people are

> emotionally intelligent, but they are chaotic. I am not at all chaotic; I like to make concrete plans. People are happy with me because I get things done but in a nice way. Realizing this helped me strengthen my style rather than see it as a weakness.

Transformative insight often elicited a commitment to change, a learning practice identified in Figure 2. When Ana, described above, realized how her overreliance on task competence had damaged her relationships, she made a commitment to "slow down," manage "the intensity of (her) behavior" and repair relationships. For Claudia, the commitment was to be more aware of her contributions. For Alexandra, it was to keep doing what she had been doing. Claudia stated, "After this course, it's like you've been given an injection of some courage, confidence, and we just shoot out, you know." Ayana had a similar sentiment: "I felt I had all this energy. I wasn't using it before, and it was the first time."

The support and affirmation WLS participants receive bolstered their conviction and confidence to act on their commitments, the third precondition of transformative learning. This conviction is necessary for the learner to be willing to experiment with new behaviors on returning to work. This leads to the final stage of transformational learning, connecting insight to leadership practice.

Connecting Insight to Leadership Practice

Armed with conviction and confidence, participants try to connect their commitment to their actual leadership practice in the fourth stage of transformational learning. The transformation from a previously established leadership practice to a new one involves sustained effort. This is not because there is a lack of commitment. Rather, to change practice, one has to overcome the ease of reverting to old habits. This was accomplished by some alumnae through teaching and learning practices that serve to recreate catalytic aspects of the training experience. One such practice, identified in Figure 2, was reawakening conviction through meaningful artifacts. Meaningful artifacts are objects given to participants by trainers that have collective and personal meaning attached to them. These objects were used by WLS alumnae to maintain the immediacy and urgency to act on a conviction that had been felt after training. They were also used as a cue that facilitated recall of empowering moments in the training setting.[6] Joycelyn's description below aptly describes how meaningful artifacts

kept the urgency for change alive once she returned to her place of work. Joycelyn explained,

> One of the exercises during the workshop was working up and down the ladder of inference. They gave us some plastic ladders, and I brought it back with me and I have it here on my bulletin board, just to remind me that I should not take things for granted and should not withhold information that the other person might need to understand. This artifact is now a symbol. A symbol is an artifact with meaning added to it—you add meaning—something that you want to remember. If you don't put meaning to it, the thing is meaningless . . . It is like (recreating the) conference with myself—when I see the ladder, I will remember that.

A frequently cited vehicle that enabled connecting insight to practice involved sustaining of relationships. WLS alumnae stayed connected to their colleagues in different centers. They called on these relationships to discuss challenges they faced or when they needed guidance. Some alumnae volunteered their time to mentor women within the CGIAR. Still others call on their colleagues to advance the scientific mission of the organization. Akini commented,

> The WLS reinforces the networks among research centers in a way that CGIAR probably isn't aware of. This morning I got a query from an Indian researcher who wanted to know who to contact in the CGIAR about a specific genetic resource question, and I knew to contact somebody at another research center because she had been on the course with me.

Leadership development is a process. At a basic level, trying out new behaviors takes risks. It involves doing what one has not done before. Sometimes, it involves going against ingrained habits. Therefore mistakes are inevitable. What is critical, however, is that the learners persist in continual learning, the final precondition of transformational learning. The WLS alumnae are supported in this through maintaining their relationships with one another and maintaining their connections with the G&D program through its other activities. This suggests that the momentum for change put in play by transformative learning experiences may be sustained if the learner is able to draw on the relationships established in training and if the organization itself engages her in activities, such as mentoring, that enable

her to deepen and further develop her competencies. Thus, the two-way arrows between the stages of transformational learning in Figure 2, indicates the potential that the process once started, and appropriately supported, can be cyclical.

Conclusions and Implications

This study used qualitative data from the WLS to explore whether and how transformational learning can be achieved for women in formal training settings. The findings of this study suggest that an environment for transformational learning was created in the WLS by the coalescing of two elements: presence of all-women learners and the use of gender-sensitive teaching and learning practices. The data suggest that the opportunity to learn with women was critical in making participants feel that their experiences were valid and important. They immediately recognized their shared experiences, and there was an eagerness to share one's own experience but also to learn from others. Furthermore, the egalitarian ethic established made participants feel safe to share their perspectives. Many said that they could not have imagined themselves opening up as they did had they been in a mixed-gender environment.

The data also identify teaching and learning practices that were employed in interactions. As depicted in Figure 2, practices are articulating a leadership dilemma, receiving and giving feedback, receiving and giving coaching, transmitting knowledge, teaching with intentionality, candor, giving support, participating in collaborative learning, engaging in deep reflection, making a commitment to change, sustaining relationships, and reawakening conviction through meaningful artifacts. These facilitated meaning making—enabling each participant to explore her dilemma deeply and to be challenged to envision new possibilities. These teaching and learning practices have already been described in the findings section and they are identified in Figure 2. The practices of giving and receiving feedback, transmitting knowledge, receiving coaching, giving support, and making a commitment to change have all been identified by leadership development researchers (e.g., Velsor, 1998). Similarly, the practice of collaborative learning, through mutual influence has been described in relational theory as "growth-in-connection" (Miller, 1991), or relational practice (Fletcher, 1998, 1999). In the WOT literature, these practices have been characterized as a "midwife" model of learning (Vinnicombe & Singh, 2003). Other teaching and learning practices, such as articulating a leadership dilemma and deep reflection have been identified by transformational learning researchers (Mezirow, 1990).

What stands out about these common teaching and learning practices is that, in the WLS, they were employed in a gender-sensitive manner.[7] For example, theoretical content and feedback was reinterpreted through the lens of participants' experiences of navigating gender challenges. This accounting for women's actual gendered experiences made the content meaningful and useful. Teaching and learning practices, such as teaching with intentionality, sustaining relationships, and reawakening conviction through meaningful artifacts are new. The first practice identifies transformational learning from the instructor's point of view whereas the last two pertain to practices to sustain learning after the training course is over. Thus, these two practices correspond with the final, new stage of transformational learning—connecting insight to real-life practice.

Although the transformational learning and WOT literatures offer insight into the research question of this study, neither fully address it. A key contribution of this study to both literatures is the conclusion that fostering transformation requires creating an environment where all aspects of the setting come together to affirm women learner's experiences while challenging and supporting them. The transformational learning literature puts relationships at the center of creating a safe holding environment but does not address the challenges of accomplishing this in formal leadership training settings. As indicated in the literature review and supported by the data of this study, women feel inhibited to open up in mixed-gender training settings for fear of being seen as weak or not taken seriously. The findings of this study suggest that WLS alumnae were temporarily freed of the need to navigate gender in the WLS by being in an all-women environment and the use of gender-sensitive teaching and learning practices. Both these elements fostered an environment that affirmed women's experiences and put alumnae at ease. Thus, transformational learning theory needs to not only put gender at center stage in understanding the process, but in doing so adopt a holistic view of how to create safe holding environments for women in leadership training settings.

These findings have implications for WOT research as well. Specifically, the findings suggest that we cannot look at the independent characteristics of WOT (e.g., such as the presence of all women, attention to gender issues, focus on learning experiences, and teaching methods) to understand how safety is created. The analysis of this study suggests that the all-female nature of the WLS was a necessary but insufficient condition for creating a safe setting conducive to transformational learning. Deep and meaningful learning and transformation was facilitated in the WLS by the coalescing of an all-women environment and gender-sensitive teaching and learning practices. The result of this was the creation of an environment that was experienced as

safe, because it holistically affirmed women's experiences. Thus, we need to look at how all these elements serve the purpose of creating an environment that is felt to be affirming and safe by women learners.

The analysis additionally contributes to the transformational learning literature by offering an expanded framework of the process. Although the WLS alumnae described going through the stages of transformational learning identified in the literature, they also described a fourth stage of connecting insight to real-life practice. In addition to this fourth stage, this study also identifies the idea of preconditions of transformational learning to suggest that movement through the stages of transformational learning is contingent on the learner having completed the learning tasks of each stage. Finally, by incorporating teaching/learning practices, the framework includes the learning activities in each stage of transformational learning. The analytic framework of Figure 2 therefore enriches current conceptions of transformational learning.

The focus on looking at the elements of a training setting holistically lays to rest the idea that safety is a necessary outcome of WOT. As I have argued above, the all-female nature of the WLS is a necessary but insufficient condition for creating a context for transformational learning for women. As some researchers have pointed out, some WOT settings encourage women to assimilate to a masculine model of leadership (Limerick & Heywood, 1993). In such cases, the teaching and learning practices devalue women's experience and are likely to inhibit safety. In contrast, in the WLS, deep and meaningful learning and transformation was facilitated by the congruence of all aspects of the environment in affirming participants' experiences.[8]

Some researchers worry that the absence of men in WOT prevents women from practicing new skills in a realistic environment (Vinnicombe & Singh, 2003). However, although practicing skills in any type of leadership setting may be somewhat helpful, the activity is largely devoid of the complexity of organizational life. This lack of realism is the primary limitation of practicing new skills in any training context, not that the practicing is done in a WOT setting. The real value of learning in WOT is that participants gain insight into the complexities involved in navigating gender. This ironically may be what is critical in developing women's leadership skills, because, gender is a pervasive feature of organizational life.

Other researchers express concern that, in an effort to "help" women fit into the masculine organizational context, WOT can dismiss or devalue women's experiences and aspirations (Gray, 1994; Reavley, 1989). To the extent that a particular WOT program emphasizes conformity over navigating gender, it reinforces the pressure women already feel in organizations and inhibits

safety in the training environment. A final concern is that WOT does not change the structural basis of women's subordination to men (Calás & Smircich, 1995; Fletcher, 1998). Proponents respond to such critiques by pointing out that although the goal of WOT is internal change (Vinnicombe & Singh, 2003), attention to structural change is also necessary (Hopkins et al., 2008; Vinnicombe & Singh, 2003). For sponsoring organizations, training programs such as the WLS can infuse women with energy and ideas, but if the organizational setting is unreceptive to what women bring back from training, it can dampen the positive impact of training for the organization and the individual women. Thus, efforts to develop women's leadership needs to go hand-in-hand with other systemic or institutional change efforts.

In the case of the WLS, there appears to be strong institutional support. Thus, conditions beyond the immediate training setting were also favorable in the WLS. First, the G&D program set the tone and expectation of participants and instructors that the goal of the WLS was to help women leaders become more successful. The fact that the WLS is an explicitly single-sex environment sanctioned by the CGIAR is important.[9] For a training opportunity such as the WLS to be regarded positively by organizational members, it must be formally sanctioned and perceived as a reward and not as stigmatization. Indeed, attendance in the WLS was seen as a reward and an acknowledgement of competence.

Furthermore, the WLS is not a discrete initiative, but part and parcel of an organizational strategy of fostering an environment of excellence through diversity. In addition to the WLS, this strategy, implemented through the G&D program, includes a mentoring program and partnerships with director generals of the research centers to develop center-appropriate strategies to foster excellence. These ongoing activities ensure that the WLS is not an isolated program that can be easily discontinued. It is one part of a strategic goal to foster an inclusive environment for women and scientists from all over the world. This suggests that it is possible for organizational and individual change efforts to be complementary, mutually supportive, and sustainable.

Beyond this, the importance of the WLS lies in the internal change it promotes. Spender (1982) makes the powerful point that knowledge about women has disappeared from education through conscious and unconscious omission.[10] She argues that what we call knowledge is very selective, pertaining to the problems and interpretations and values of men. The omission of female problems, interpretations, and values in what we regard as knowledge coexists with the devaluing of women's self-expression and leadership. Girls first doubt then eventually lose sight of their unique experiences and begin to

define themselves in relation to the negative external messages about their worth. By the time girls grow into women, they consciously or unconsciously develop the belief that power lies outside of them and not inside (Steinem, 1993). Learning environments that do not question this deeply cultural basis of women's sense of exclusion from mixed-gender learning environments are likely to unwittingly inhibit safety and opportunities for transformational learning for women. The WLS is unique because it creates an environment that affirms women's experiences in a holistic way and invites women on the path toward developing their leadership abilities. Growth that evolves through deep personal reflection resulting in self-authorship is a task that leadership researchers see as fundamental to becoming a leader (Bennis, 1989; Eriksen, 2009; Quinn & Spreitzer, 2006; Zaleznick, 1977).

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Notes

1. There has recently been a growing call for the incorporation of transformational learning principles into management education. See, for example, Cunliffe (2004) and Dehler (1996).

2. Although Winnicott focuses on mother–infant relationships, the mother's activities are applicable to learning throughout life (Miller, 1986; Winnicott, 1989). In childhood, the mother orchestrates the elements of the child's environment to enhance its well-being and provide opportunities for exploration and growth (Miller, 1991). In Winnicott's (1958) terms, she is the original transitional object. This basic trust enables the child to confidently seek new experiences even when some elements of the holding environment are absent (Winnicott, 1958). Van Buskir and McGrath (1999) provide an excellent example of this in their study of the transformation of women in an economically deprived community from welfare mothers to college-bound future professionals.
3. These courses were offered by outside consultants and/or a consulting firm.
4. Consistent with a grounded theory approach, sampling of alumnae was guided by theoretical considerations (Glaser & Strauss, 1967). The concern was with developing theoretical insights and not sample representativeness as is the case in quantitative research. Theoretical insights were pursued by maximizing variation among the interviewees to expand and refine theoretical ideas that emerge during data collection and analysis.
5. This typology is based on Block (1987).
6. Winnicott (1958) referred to the use of transitional objects in this manner as "transitional phenomena."
7. Hopkins et al. (2008) argue that interpreting the content of leadership training through a gender-sensitive lens is important and necessary for significant learning for women.
8. See Limerick and Heywood (1993) for a similar point.
9. Thompson (2007) reported on the importance of formal sanctioning in her study of academic improvement among children labeled as "different" within the broader school context.
10. For a similar point, see Miller (1986), Chodorow (1978), and Gilligan (1982).

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