Research Papers

CHANGES IN CONVENTIONAL MASCULINITY AND PSYCHOLOGICAL WELL-BEING AMONG PARTICIPANTS IN A MUTUAL HELP ORGANIZATION FOR MEN

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ABSTRACT

The study modeled the theory of a mutual help organization, the ManKind Project®, that masculinity harms men's well-being and that men changing their masculinity through participation in the organization's mutual help settings will improve well-being. The study hypothesized that conventional masculinity (i.e., adherence to masculine gender role norms and stereotypes) would decrease over time and mediate changes in psychological well-being among 128 U.S. participants in the organization (mid-Atlantic region, highly educated, mostly white, disproportionately gay/bisexual). Participants completed questionnaires once before and 3 times after initiation into the organization. Linear latent growth models fitted to the data showed that conventional masculinity decreased (p < .001) and partially mediated (p < .001) an increase (p < .001) in psychological well-being, supporting the

hypotheses. The findings replicate earlier findings that conventional masculinity is associated with poorer psychological well-being and suggest potential benefits to psychological well-being from decreases in conventional masculinity associated with participation in a mutual help organization.

Keywords: mutual help, masculinity, masculinity ideology, gender role strain, psychological well-being, social support

In the wake of mid-20th century feminism, sociologists (e.g., Komarovsky, 1976; Turner, 1970) and psychologists (e.g., David & Brannon, 1976; Pleck, 1981) criticized men's adherence to cultural norms and stereotypes of the masculine gender role, for which we use the term *conventional masculinity* in this article, as having a negative effect on men's well-being. These writers analyzed conventional masculinity as including unrealistic beliefs about how men are expected to be (for example, beliefs that men should be successful, powerful, and competitive), and behavioral dysfunctions involved in men's efforts to adhere to these beliefs (for example, emotional inexpressiveness and avoidance of intimacy, especially with other men). These unrealistic beliefs and behavioral dysfunctions are the mechanisms through which these analysts see conventional masculinity harming men's well-being.

Similarly, some individuals and groups for men have sought to help men to reduce their conventional masculinity as a way to improve their well-being (e.g., Bliss, 1995; Bly, 1995; Harding, 1992). The methods promoted for men to use to change have frequently taken the form of participation in mutual help groups and organizations (e.g., Kauth, 1992; Schwalbe, 1996), but there have been few empirical studies of the effects of participation in such groups or organizations on conventional masculinity or psychological well-being (e.g., Barton, 2000; Schwalbe, 1996). The larger research project from which the data reported in this article derives is one of the few. In that larger project, we followed men who participated in the ManKind Project[®], a men's mutual support organization (The ManKind Project®, 2013a) for more than 18 months to understand how they changed. In the present article, we use some of the data from that larger study to test the theory that is shared by both the psychological study of men and masculinity and one community organization aiming to help men—that conventional masculinity harms psychological well-being. Further, we evaluate linear growth models of the organization's theory of change—that conventional masculinity decreases among participants in the ManKind Project® and the decreases in conventional masculinity cause improvements in psychological well-being.

In 1984, three men who were involved in men's movement activities in Milwaukee, Wisconsin, initiated the psychoeducational and initiatory training that developed over time into the ManKind Project[®]. They believed that men were motivated to seek to change their masculinity because of the negative effects

of conventional masculinity on psychological well-being (Kauth, 1992). Today, the ManKind Project® consists of national chapters and regional centers within those chapters in the United States, Canada, Western Europe, South Africa, and Australia. The ManKind Project® aims to provide settings in which men reduce their conventional masculinity by changing their beliefs about masculinity, by reducing the dysfunctional behavior in which they engage because of their beliefs, especially in the domain of emotional expression, and by increasing their social support from other men. First, men are exposed to other men who hold positive attitudes toward men, toward their experiences as men, and toward their capacity to change, thus modeling positive beliefs about men. Second, men work individually on reducing dysfunction in their lives through mutual help techniques largely based in psychodrama. Third, men receive social support from other men.

In this study, we followed men who participated in The ManKind Project® for more than a year, collecting questionnaire data before participation began, and three times after, timed to capture the effects of the three settings provided by the organization's program for helping men to change. The first setting is an intense weekend experience, The New Warrior Training Adventure, which is proprietary and conducted by regional centers under license from the organization. However, written protocols and other information about the training are available on the organization's website, through information sessions, and in other publications that have focused on the training. Several members of our research team, including the first author, have participated in and contributed to the New Warrior Training Adventure multiple times.

The training is conducted in isolated retreat facilities and participants are asked to give up contact with the outside world and normal comforts of everyday life during the weekend. The setting is designed to increase participants' self-awareness of their beliefs about masculinity, understanding of the dysfunctional effects of conventional masculinity on their lives, and efficacy in their capacity to provide mutual help in support of change. The program includes group discussions, games, guided visualizations, journaling, psychodrama, and initiation ritual (The ManKind Project®, 2013b). In his U.S.-based ethnography of the intervention, Pentz (2000) identified four features:

- 1. emphasis on accountability;
- emphasis on expression of feelings;
- 3. personal growth and healing work using psychodrama and Gestalt therapy techniques; and
- 4. creation of a mission.

In an earlier publication by our research group, we identified a similar list of features:

- 1. increasing awareness of emotional wounds;
- overcoming barriers to intimacy and trust with other men; and

3. developing a vital and constructive mission in life (Mankowski, Maton, Burke, Hoover, & Anderson, 2000).

In Burke, Maton, Mankowski, and Anderson (2010), we identified the core components as:

- 1. a design intended to encourage behavioral exploration of non-conventional masculinity; and
- 2. peer support provided by the large volunteer cadre of organization members who also participate in the training.

After conducting the New Warrior Training Adventure a number of times, the creators came to believe that the experience was so powerful for men that they took months to integrate it into their personality and lives and that the integration process worked better if they stayed in contact with other men who had done the training (Kauth, 1992). Based on this belief, in 1986, they designed the second setting of The ManKind Project program—the "primary integration training" as an 8-week-long weekly support and training group. Subsequent revisions have expanded the number of weekly sessions and also introduced alternative formats with fewer and more extensive sessions. The integration training was based on the training model for support groups that one of the organization's founders developed over many years of conducting support groups for men (Kauth, 1992, 1997). Volunteers facilitate the primary integration training using a prepared protocol. The protocol provides a ritualized structure for group meetings, a series of exercises focused on issues that The ManKind Project believes are important to men (e.g., trust and safety, anger and projection, grief and compassion, fear and responsibility, healing and blessing, shame, self-trust and personal vision, and service), ground rules and communication guidelines (Table 1), and more opportunities to participate in and observe the psychodrama-based format for personal growth and healing work that is introduced during the New Warrior Training Adventure. The purposes of the primary integration training are to help men integrate the effects of the New Warrior Training Adventure into their lives and to prepare the participants for ongoing participation in the third setting provided by the organization, mutual-help groups called integration groups.

The third setting provided by The ManKind Project program is the open-ended, autonomous mutual help groups called integration groups or I-groups. The I-groups are typically structured by the meeting format provided in the primary integration training, which is based on a book on masculine archetypes (Moore & Gillette, 1990)—focusing in turn on the lover (sharing feelings), the warrior (communicating personal failures and resolving interpersonal conflicts), the magician (intentional efforts to further personal growth and healing), and the king (recognizing one another's successes and expressing respect and admiration for one another). The group process is guided by the ground rules and communication guidelines (see Table 1) taught in the primary integration training.

Table 1. Ground Rules and Communication Guidelines Taught in The ManKind Project Integration Training

Ground rules	Communication guidelines
Take responsibility for yourself.	Speak freely and openly.
Come prepared.	Speak directly to other men.
Tell the truth.	Any man may pass.
Maintain confidentiality.	Be aware of feelings.
Tell the group if you are high or have been drinking.	Be "here and now." Use "I" statements.
Inform another member of the group who will be attending if you are to be absent or late.	Avoid questions, especially the question "why?"
Process in the group your decision to leave the group or drop out for a time.	Be descriptive; avoid judgments.

The central premise is that I-groups provide a safe, but challenging, context in which men work to improve aspects of their lives that are dysfunctional for them. Group members engage in their personal work by choosing a situation in their lives and working on that situation in one of several formats. A key aspect of all the formats used by men in integration groups is that the man working chooses another man in the group to facilitate. Further, one or more other members of the group, in addition to the chosen facilitator, may also play roles. I-group participants are exposed to the formats in the New Warrior Training Adventure, the primary integration training, and various follow-up trainings that are offered in The ManKind Project® community. Members also bring to their groups knowledge and skills related to personal development that they have obtained from other sources. Personal growth and healing work using these formats is the primary activity of I-group meetings. Although the psychodrama format that is used in the New Warrior Training Adventure is also used in the I-groups, groups vary in the degree to which they adhere to the received meeting format and structure. Further, because each meeting is led by one man in an informal rotation, the meeting format varies within groups from meeting to meeting based on the meeting leader. Our research group has focused on I-groups in some other research projects we have conducted (Mankowski et al., 2000; Mankowski, Maton, Burke, & Stephan, 2014).

The foregoing description of the ManKind Project® is ours; it has not been endorsed by the ManKind Project®, nor do we assume that the organization or its founders would endorse it. Also, we do not intend to suggest that the features that we have identified are exhaustive of the intended or effective elements of the program. The organization emphasizes the liminal rite of initiation (LaFontaine, 1985; Turner, 1969) and non-sectarian spirituality that we have not attempted to capture in our model. Rather, to build our model, we have used the constructs and theories of the psychology of masculinity, especially the *gender role strain paradigm* (e.g., Addis & Mahalik, 2003; David & Brannon, 1976; Hacker, 1957; Pleck, 1995) that dominates contemporary psychological theory and research on men and masculinity and posits two central constructs—masculinity ideology and gender role strain.

In the gender role strain paradigm (e.g., Addis & Mahalick, 2003; Pleck, 1995), beliefs about masculine gender role norms have been termed *masculinity ideology;* in other words, "beliefs about the importance of men adhering to culturally defined standards for male behavior" (Pleck, 1995, p. 19). Masculinity ideology has been assessed by the level of endorsement of such standards by men (Addis & Mahalick, 2003).

In the gender role strain paradigm, men's efforts to adhere to gender norms are necessarily dysfunctional, because adherence to gender norms is for most men impossible to achieve, is no longer met by the reciprocal role performance of women that makes it meaningful, and is no longer rewarding (Turner, 1970). Pleck (1995) used the term *gender role dysfunction strain* to refer to these dysfunctions that are inherent in men's efforts to adhere to gender role norms, borrowing from the sociological concept of role strain (Goode, 1960; Komarovsky, 1976; Turner, 1970). Gender role dysfunction strain has been assessed by men's experience of dysfunction arising from their adherence to conventional masculinity.

Although we do not claim any endorsement of our model by the organization, we do believe that the theory underlying men's organizations such as the ManKind Project that aim to help men change corresponds closely to the gender role strain paradigm, which has conceptualized masculinity and documented the relationship between negative aspects of masculinity and problems in men's health and well-being.

Among the various constructs that have been used to assess psychological well-being (Diener, Oishi, & Lucas, 2003; Ryan & Deci, 2001) in prior work on masculinity and well-being, the relationships between conventional masculinity, on the one hand, and negative affect, life satisfaction, and self-esteem, on the other, have received considerable attention with one major review (O'Neil, 2008) claiming that, overall, the cross-sectional research supports the conclusion that conventional masculinity is significantly negatively related to several aspects of psychological well-being. There is also a small research literature that tests whether intentional efforts by men to change their masculinity are effective and associated with improvements in psychological well-being. O'Neil (2008)

reported six published studies of interventions to change conventional masculinity and we found one additional study (Bartholomew, Hiller, Knight, Nucatola, & Simpson, 2000). Most of these studies found some pre- to post-intervention change in variables related to conventional masculinity, but conventional masculinity rebounded to pre-intervention levels at 6 weeks in the one study with a longer follow-up (Davis & Liddell, 2002).

There are three previously published studies of The ManKind Project® (Burke et al., 2010; Mankowski et al., 2000; Pentz, 2000), including two from the same research project as the current study. These prior reports support the conclusion that some masculinity measures and some psychological well-being measures change among participants in the ManKind Project®, but Mankowski et al. (2000) only reported pre- and immediate-post-participation data and the set of measures reported by Burke et al. (2010) is partly the same and partly different from the set of measures used in this article. Burke et al.'s emphasis was on demographic moderators and potential causal mechanisms for the beneficial effects of mutual support on well-being that had been suggested in prior research on mutual help. The current study has a different goal—to test the theory of one mutual support organization for men: that change in conventional masculinity is an effective mechanism for improving well-being. Further, this study aims to elucidate the pattern of change over multiple time points, in contrast with Burke et al. (2010) and Mankowski et al. (2000), which only compared data from two time points. Our study may cast light on differences in the effects of the three settings provided by the ManKind Project® and on the question of how much of the observed change occurs early and how well the change persists and continues to increase. In so doing, this article makes a unique contribution to current knowledge.

HYPOTHESES OF THE STUDY

In this study we tested the following hypotheses:

- Hypothesis 1. Conventional masculinity is negatively associated with psychological well-being among men prior to their participation in the ManKind Project[®], a mutual support organization for changing men;
- Hypothesis 2. Conventional masculinity decreases over time among participants in the ManKind Project[®];
- Hypothesis 3. Psychological well-being increases over time among participants in the ManKind Project®; and
- Hypothesis 4. Conventional masculinity mediates improvements over time in psychological well-being among participants in the ManKind Project[®].

Although other studies have provided support for these hypotheses, this study directly evaluates a model of the relationship between conventional masculinity and psychological well-being over a substantial period of time among participants in a mutual help organization that aims to support men in changing their masculinity and thereby improving their lives.

METHOD

Participants

The study sample was recruited from the registrants (N = 237) for the nine New Warrior Training Adventures sponsored by the ManKind Project[®] of Greater Washington from June 1997 through May 1999. Registrants were recruited through the personal contacts of men who had already participated in the Training, through advertisements in local media, booths at community events, and informational meetings for interested men. Although we do not have data on men's motivations to join the ManKind Project[®], the organization's recruitment message is that participation provides a context for men to address important problems, especially problems related to their socialization as men.

Demographic characteristics were available for the 86% (205/237) of the registrants who returned a questionnaire or provided an interview. They had an average age of 43.7 years, were highly educated, predominantly white, and had high levels of experience with self-help and therapy. Approximately half were married (or reported equivalent relationships) at the time they began their participation. Gay and bisexual men were over-represented among registrants, relative to typical estimates of the proportion of gay and bisexual men in the U.S. general population (e.g., Laumann, Gagnon, Michael, & Michaels, 1994; Reece, Herbenick, Schick, Sanders, Dodge, & Fortenberry, 2010). The demographic characteristics of the registrants are summarized in Table 2.

One hundred and forty-one registrants returned a completed baseline questionnaire (see Procedures below), which initiated their participation in the study, but 13 registrants were eliminated from the sample, 8 because they did not return consent forms, and 5 because they reported completion dates for the pre-training questionnaires that were later than the date of the training they attended. Thus, the final study sample included 128 men (54.0% of all registrants). A comparison of the demographic characteristics of the study sample to the demographic characteristics of the rest of the participants in the larger study not included in the study sample (77) revealed no significant demographic differences.

Procedure

Study Design

The study had a one-group longitudinal design with one pretest and three posttests—immediately after the intervention, 6 months later, and 18 months later. We began the research in June 1997 and ended follow-up efforts in November 2001. The research was conducted in collaboration with The ManKind Project® of

Table 2. Demographic Characteristics of 86% of Registrants in Nine Trainings Sponsored by the Greater Washington, DC Center of the ManKind Project® from June 1997 to May 1999

			N
Age	Mean (SD)	43.70 (10.12) ^a	205
Education ^b	Mean (SD)	7.57 (1.77)	205
Ethnic minority	% Yes	7.3	205
Currently partnered	% Yes	54.2	205
Children in home	% Yes	38.5	205
Gay or bisexual	% Yes	18.2	203
Military experience	% Yes	24.1	203
Currently involved in religious organization	% Yes	23.6	199
Self-help group experience	% Yes	70.2	205
Therapy experience	% Yes	84.4	205
Referred to training by a therapist	% Yes	24.9	205
Participation in the ManKind Project® at 6 months after training ^c	% Yes	54.9	204
Participation in the ManKind Project® at 18 months after training ^c	% Yes	47.5	204

aRange = 19-74.

Greater Washington, to which it was proposed in 1996 by the second author. Three research team members are participants in The ManKind Project[®].

Data Collection

Questionnaire data were collected through mailed questionnaires sent prior to and 2 weeks, 6 months, and 18 months after the intervention. The three members of the research team who were themselves participants in the ManKind Project® made telephone calls to the participants to encourage them to return the questionnaires. Follow-up calls for the 18-month questionnaire continued until June 2001 for those participants from whom an 18-month questionnaire had not been received. Members of the research team contacted all participants by phone to

^bEducation was coded as a continuous variable using Hollingshead's coding system for education (2011).

^cDefined as reported participation in an "integration" group, the follow-up support group that is the third setting of the ManKind Project[®] program.

schedule a telephone interview at 1 year after the date of the New Warrior Training Adventure that the participant had attended.

Measures

Conventional Masculinity

We created the conventional masculinity measure for this study to be a comprehensive measure incorporating both masculinity ideology and gender role dysfunction strain, the central constructs of the contemporary psychological study of masculinity, and a third element, male social support, which is central to the ManKind Project[®]. The conventional masculinity score was created by summing the scores for the following measures:

- for masculinity ideology (Pleck, 1995), the Gender Role Conflict Scale-I Success, Power, and Competition Subscale (e.g., "Doing well all the time is important to me") (O'Neil, Helms, Gable, David, & Wrightsman, 1986);
- for gender role dysfunction strain, the Gender Role Conflict Scale-I Restrictive Emotionality Subscale (e.g., "I have difficulty expressing my tender feelings") and Restrictive Affectionate Behavior Between Men Subscale (e.g., "I am sometimes hesitant to show my affection to men because of how others might perceive me") (O'Neil et al., 1986); and
- 3. for perceived male social support, counts of men nominated by respondents as meeting the criteria in three items from the Social Support Questionnaire (e.g., "Who can you count on to listen openly and uncritically to your innermost feelings?" (Sarason, Levine, Basham, & Sarason, 1983).

Although perceived male social support is not a central construct of the gender role strain paradigm, male social support is at the central to the ManKind Project® theory and has been noted by gender role strain paradigm theorists as implicated in both masculinity ideology and gender role strain (Pleck, 1995). The three measures combined in the conventional masculinity measure were scored on 6-point scales with scores 1-6. Thus, the scores on the conventional masculinity measure ranged from 3 (scores of 1 on all three measures) to 18 (scores of 6 on all three measures). Scores of 3 indicated low conventional masculinity (i.e., low endorsement of a masculinity ideology involving success, power, and competition and of difficulties with emotional expression, including expression of affection for other men; and high levels of perceived social support from men). Scores of 18 indicated high conventional masculinity (i.e., high endorsement of a masculinity ideology of success, power, and competition and of difficulties with emotional expression, including expression of affection for other men; and low levels of perceived social support from men). For a fuller description of the component measures that were combined to create the conventional masculinity measure, including information on their reliability and validity in this study, contact the first author or see Anderson (2006).

Psychological Well-Being

We created the psychological well-being measure for this study to be a comprehensive measure incorporating elements of two different definitions that theorists and researchers have used for psychological well-being (Diener et al., 2003; Ryan & Deci, 2001):

- 1. subjective well-being, consisting of affect and life satisfaction; and
- 2. optimal functioning, including such factors as self-esteem, mastery, and integrity.

The psychological well-being score was created by summing the scores of the following measures of the selected psychological well-being constructs:

- 1. Negative affect—the Brief Symptom Inventory Anxiety Subscale (e.g., "In the last week, how much were you distressed by nervousness or shakiness inside") (Derogatis & Melisaratos, 1983);
- 2. Negative affect—the Brief Symptom Inventory Depression Subscale (e.g., "In the last week, how much were you distressed by feeling no interest in things") (Derogatis & Melisaratos, 1983);
- 3. Life satisfaction—the Satisfaction with Life Scale (e.g., "I am satisfied with my life") (Diener, Emmons, Larsen, & Griffin, 1985);
- 4. Self-esteem—the Rosenberg Self-Esteem Scale (e.g., "I feel that I have a number of good qualities") (Rosenberg, 1986);
- 5. Mastery—the Pearlin's Mastery Scale (e.g., "I have little control over the things that happen to me") (Pearlin & Schooler, 1978); and
- 6. Optimal functioning as defined by The ManKind Project[®] (i.e., integrity, accountability, and connection to feeling)—the mean of the scores on five items written by the research team:
 - a. I am learning how to live from my deepest core being or truth;
 - b. I have discovered clear-cut goals and a satisfying life purpose;
 - c. I am learning to accept total responsibility for all aspects of my life;
 - d. I am learning to be accountable for my own feelings, judgments, opinions, and actions; and
 - e. I am learning to live in the world with an open heart").

The six measures were scored on 5-point scales with scores 1-5. Thus, the scores on the psychological well-being measure ranged from 6 (scores of 1 on all six measures) to 30 (scores of 5 on all six measures). Scores of 6 indicated low psychological well-being (i.e., high levels of self-reported anxiety and depression in the last week and low endorsement of satisfaction with life, self-esteem, mastery, and the ManKind Project® optimal functioning attributes of integrity, accountability, and connection to feeling). Scores of 30 indicated high psychological well-being (i.e., low levels of self-reported anxiety and depression in the last week and high endorsement of satisfaction with life, self-esteem, mastery, and the ManKind Project[®] optimal functioning attributes of integrity, accountability, and connection to feeling). For a fuller description of the component measures that were combined to create the psychological well-being measure, including information on reliability and validity in this study, contact the first author or see Anderson (2006).

RESULTS

Preliminary Analyses

Missing Data

Overall, 37.5% of the data were missing: 35.2% missing at post-Training; 57% missing at 6 months post-Training; and 20.3% missing at 18 months post-Training. We singly imputed all missing data following the procedure specified in Graham and Hofer (2000) using NORM (Schafer, 2000). The analyses were conducted on the fully imputed data set. We imputed data in order to avoid the biased parameter estimates that statistical analyses using only cases with complete data (listwise deletion) may produce (West, 2001). In this manner, we were able to retain data in the analyses from all respondents who began participation in the study by returning a baseline questionnaire.

Descriptive Statistics

Means and standard deviations for the conventional masculinity measure and for the psychological well-being measure at each of the four data collection times are presented in Table 3.

Table 3. Means and Standard Deviations for Conventional Masculinity and Psychological Well-Being

	Conventional masculinity		Psychological well-being		
	Mean	SD	Mean	SD	
Time 1	11.63	2.20	20.66	4.03	
Time 2	10.53	2.01	22.62	3.21	
Time 3	10.18	2.11	23.43	3.60	
Time 4	10.01	1.98	23.29	3.27	

Note: The authors created the conventional masculinity measure for this study by combining measures of masculinity ideology, gender role dysfunction strain, and perceived male social support. The scores of the conventional masculinity measure range from 3 (low) to 18 (high). The authors created the psychological well-being measure for this study by combining measures of negative affect, life satisfaction, self-esteem, mastery, and the ManKind Project[®] conception of optimal functioning well-being. The scores of the psychological well-being measure range from 6 (low) to 30 (high).

Assessment of the Relationship between Conventional Masculinity and Psychological Well-Being Prior to Participation in the ManKind Project®

Hypothesis 1 was that conventional masculinity would be negatively associated with psychological well-being among men prior to their participation in the intervention, which we evaluated using correlation analysis. The hypothesis was supported by the results: conventional masculinity and psychological wellbeing were negatively correlated among men prior to their participation in the ManKind Project[®]: r = -.63, p < .002.

Assessment of Change in Conventional Masculinity and Psychological Well-Being Over Time: **Latent Growth Models**

In order to assess change in conventional masculinity and psychological wellbeing over time in our sample, we fitted the latent growth models presented in Figure 1 using Mplus (Muthen & Muthen, 2005). The latent growth models in Figure 1 represent individual change over time as composed of two componentsthe latent intercept (i.e., the best estimate of the mean level of the criterion variable at the first time of measurement) and the latent slope (i.e., the best estimate of the amount of change over time in the criterion variable). The time of each measurement was allowed to vary between individuals with a month as the unit of time. The first time of measurement was fixed at zero for all participants and subsequent times of measurement calculated as months from the date of participation in the New Warrior Training Adventure. The fit of a growth model to the data assesses how well the model represents the observed time 1 mean and the observed change overtime in the variable (i.e., how much the individuals' actual data vary from the estimated intercept and the estimated slope that together mathematically fit the data best). To test the hypothesis that change over time is statistically significant, first a model with only the intercept (mean at time 1) is fit to the data. Second, a model with both the intercept and the slope (change over time) is fitted to the data. Third, the increase in fit from the first model to the second is tested for statistical significance.

Latent growth models that consist solely of the latent intercept and the latent slope are unconditional (one variable) models, whereas conditional models include additional variables theorized to affect or "condition" the intercept or the slope of the criterion variable. We will use unconditional growth models to test hypotheses 2 and 3 that change over time in levels of conventional masculinity and psychological well-being, respectively, will be statistically significant in the predicted direction, decreasing over time for conventional masculinity and increasing over time for psychological well-being. Hypotheses 2 and 3 will be supported if the addition of the slope to the growth models produces a

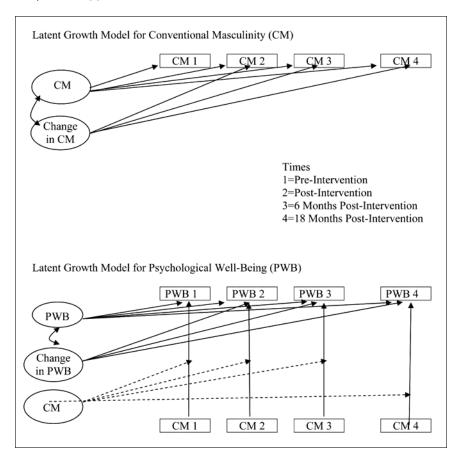


Figure 1. Latent growth models for conventional masculinity and for psychological well-being with conventional masculinity as a time-varying covariate at Times 1-4.

statistically significant increase in fit. We will use a conditional growth model to test hypothesis 4 that conventional masculinity mediates growth in psychological well-being, in other words that change in conventional masculinity is the mechanism through which participation in the ManKind Project® affects psychological well-being. The model will include conventional masculinity (conditional variable) as a factor affecting the growth in psychological well-being (criterion variable). Hypothesis 4 will be supported if the addition of conventional masculinity to the growth model for psychological well-being produces a statistically significant increase in fit when compared to the unconditional growth model.

Assessment of Change in Conventional Masculinity Over Time

The results of the growth curve analysis to test hypothesis 2, that conventional masculinity would decrease over time among participants in the ManKind Project® supported the hypothesis: the introduction of the latent slope to the model significantly increased the fit of the model to the data, X_{diff} (1) = 13.18, p < .001 (see Table 4). The coefficient for the regression of conventional masculinity on time was statistically significant, b = -0.03, p < .001, $r^2 = 0.01$. Thus, the model estimated that conventional masculinity decreased on its 3-18 point scale at a rate of .03 points per month. Although statistically significant, this estimate that conventional masculinity changed only 0.72 point on its 16-point scale over 24 months, the mean time of measurement for the time 4 data collection, is less than half of the observed change of 1.62 points, which using Cohen's d is an effect size of -0.78, a large negative effect (Cohen, 1977).

The observed means for conventional masculinity are plotted in the upper panel of Figure 2. We used the mean number of months after the intervention that the time 3 and time 4 questionnaires were returned as time 3 and time 4 values, respectively, on the x-axis in Figure 2. The plot shows clearly that conventional masculinity decreased as predicted, as the significant effect of time in the model confirmed, but the curvilinear appearance of the plot for the conventional masculinity means in Figure 2 indicates that individual change over time in conventional masculinity did not conform to a simple linear pattern.

Assessment of Change in Psychological **Well-Being Over Time**

The results of the growth curve analysis to test hypothesis 3, that psychological well-being would increase over time among participants in the ManKind Project[®], supported the hypothesis: the introduction of the latent slope to the model significantly increased the fit of the model to the data, X_{diff} (3) = 10.17, p < .05(see Table 4). The coefficient for the regression of psychological well-being on time was statistically significant, b = 0.04, p < .001, $r^2 = 0.004$. Thus, the model estimated that psychological well-being increased on its 6-30 point scale at a rate of 0.04 point per month. Although statistically significant, this estimate that psychological well-being changed only 0.96 point on its 25-point scale over 24 months, the mean time of measurement for the time 4 data collection, is only about two-fifths of the observed change of 2.54 points, which using Cohen's d is an effect size of 0.70, a large positive effect (Cohen, 1977).

The observed means for psychological well-being are plotted in the lower panel of Figure 2. We used the mean number of months after the intervention that the time 3 and time 4 questionnaires were returned as time 3 and time 4 values, respectively, on the x-axis in Figure 2. The plot shows that psychological well-being increased among the participants in the Training through time 3, but

Table 4. Latent Growth Models of Conventional Masculinity and Psychological Well-Being among the ManKind Project® Participants

	Conventional masculinity		Psychological well-being		
N = 128	Model 1 intercept only	Model 2	Model 1 intercept only	Model 2	Model 3 conventional masculinity
Fixed effects Intercept	10.37*** (0.16)	10.71*** (0.18)	22.87*** (.27)	22.41*** (.29)	31.32*** (.70)
Time		-0.03*** (0.01)		.04*** (.01)	.03** (.01)
Conventional masculinity					85*** (.07)
Random effects Intercept	2.76*** (0.37)	2.75*** (0.37)	7.55*** (1.19)	7.81*** (1.25)	2.30 (1.65)
Time				.00 (.00)	.00 (.00)
Time with intercept				02 (.04)	05 (.03)
Conventional masculinity					.03* (.02)
Fit increments for nested models Deviance Difference χ^2 Difference df	-1010.97 	-997.79 13.18*** 1	-1282.01 	-1271.84 10.17* 3	-1201.40 70.44*** 2

Note: Standard errors are provided in parentheses. The ratios of the parameter estimates to their standard errors were evaluated for statistical significance by referring to the standard normal distribution. Time = change over time. Deviance = a measure of model fit. The difference between the fit of nested models is evaluated by the difference between the deviances of the two models. This difference is distributed as chi square for degrees of freedom equal to the difference in the number of parameters in the two models being compared.

^{*}p < .05; **p < .01; ***p < .001.

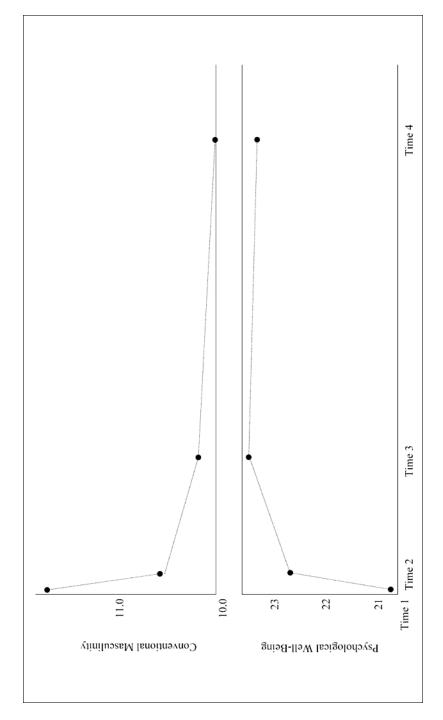


Figure 2. Change in conventional masculinity over time and change in psychological well-being over time.

declined at time 4 relative to time 3. Thus, psychological well-being increased significantly over the period of the study from the level prior to participation in the ManKind Project[®], but declined from time 3 to time 4. This result raises the question of whether the increases would be further sustained. The curvilinear appearance of the plot for the psychological well-being means in Figure 2 indicate that individual change over time in psychological well-being did not conform to a simple linear pattern.

Conventional Masculinity Mediates the Change in Psychological Well-Being Over Time

The results of the growth curve analysis to test hypothesis 4, that conventional masculinity would mediate improvements in psychological well-being over time among participants in the ManKind Project®, supported the hypothesis. The addition of conventional masculinity to the unconditional growth model for psychological well-being resulted in a significant improvement in fit, $X_{\text{diff}}(2) =$ 70.44, p < .001 (see Table 3). The coefficient for the regression of psychological well-being on conventional masculinity was statistically significant, b = -.85, $p < .001, r^2 = .21$. Thus, the model estimated that for every 1 point change in conventional masculinity on its 16-point scale, psychological well-being changes in the opposite direction 0.85 points on its 25-point scale. The addition of conventional masculinity into the growth model for psychological well-being reduced the estimate for the effect of time from 0.04 to 0.03 relative to Model 2, but not to zero, indicating that conventional masculinity only partially mediated the effect of time on psychological well-being. Thus, other factors in addition to conventional masculinity that are not included in our model are affecting psychological well-being over time.

DISCUSSION

Conventional Masculinity and Psychological Well-Being

The results of the study confirmed the hypotheses that both conventional masculinity and psychological well-being would change significantly among participants in the ManKind Project®'s mutual help settings over the course of the roughly 2 years following the initiation of their participation. The models' estimates of the growth effects, however, were small. One reason may be that the growth model tested in this study was a simple linear model. The plots of the observed means showed the change in both conventional masculinity and psychological well-being to be greatest immediately after the intervention. Overall, it appeared that psychological well-being actually decreased slightly between the last two data collection times in the study. Thus, a simple linear growth model may not be the best model for the process. Alternative models that

need to be explored in future research include a two-process linear model where the slope is larger from pre- to immediate-post and smaller thereafter, which would model the situation of the "dosage" of change delivered by the New Warrior Training Adventure being greater than the dosage delivered by the second two settings in the ManKind Project® program. This model would also represent the situation in which attrition from the program results in the average dosage for the sample as a whole decreasing over time. Another alternative is a quadratic model in which the impact of the intervention is large immediately, but the gain tapers off, perhaps due to a ceiling effect in which continued loss in conventional masculinity or gain in psychological well-being are not possible as they reach their asymptotes.

This study tests the theorized relationship between masculinity and well-being that has been at the center of the contemporary theory and research in the psychology of men and masculinity and adds to our knowledge of mutual support groups as a setting in which men can improve their well-being by altering their masculinity. The hypothesis that change in conventional masculinity would account for change in psychological well-being was also supported and estimated as a large effect. The significant relationship between conventional masculinity and psychological well-being supports the premise of both the gender role strain paradigm (Addis & Mahalick, 2003; Pleck, 1995) that conventional masculinity is an important influence on psychological well-being and the premise of some community organizations, such as the ManKind Project®, that conventional masculinity can be affected through intentional efforts to change, resulting in improvements in psychological well-being. The mechanisms of the change may include the following:

- 1. a decrease in conventional masculinity ideology increases men's self-esteem (Kauth, 1992) (i.e., improving men's attitudes toward men and masculinity results in an improvement in their attitudes toward themselves);
- 2. a reduction in gender role dysfunction and discrepancy strain (Pleck, 1995) decreases negative affect and increases life satisfaction (i.e., decreasing men's dysfunctional enactment of masculinity and their anxieties about not measuring up to norms of masculinity has a salutary impact on wellbeing); and
- 3. an increase in male social-emotional mutual support enables the first two mechanisms, aids in coping, thereby increasing mastery, and, through the particular processes and values of the ManKind Project[®], encourages integrity, accountability, and connection to feeling.

The finding that conventional masculinity mediated change in psychological well-being in this mutual help organization also suggests some mechanisms through which mutual support has beneficial effects that have been proposed in the literature—a set of beliefs that counter the problematic beliefs at the core of the shared problem that bring people together for mutual support and specific

coping strategies relevant to that problem (Levine, Perkins, & Perkins, 2005; Maton, 2000). In addition, the results are also consistent with the results of a study of a psychoeducational curriculum on relationships and sexuality for male-only groups that was part of a substance abuse treatment program (Bartholomew et al. 2000). The sample in Bartholomew et al. was similar to our sample in two ways: the samples included a spread of ages across the adult lifespan, not just college-aged men; and the men in the two samples probably had elevated personal distress that likely motivated the men to participate in the programs.

Limitations

This study has a number of important limitations that affect interpretation of the results. The one-group design, even with multiple data collection points as in this study, has a number of potential threats to its internal validity (Cook & Campbell, 1979). These include history, statistical regression, and maturation. Although these threats to internal validity cannot be ruled out, they seem less plausible for the present study because the design involved nine separate cohorts assessed over nine different time periods, Without a control or comparison group, we were not able to determine whether participants' responses reflected their beliefs about the changes that would be expected in the context of their participation in the mutual support setting, rather than actual changes in their masculinity or well-being.

The data analytic models used cannot unequivocally determine whether changes in conventional masculinity caused the changes in psychological well-being. A reversal of the hypothesized direction of influence, some reciprocal influence between the two variables, and the existence of some other variable(s) that influenced both conventional masculinity and psychological well-being are alternative explanations. Because the sample was predominantly white and well educated, we cannot know whether the results would generalize to a more diverse population of men. Brod (1992, 1995) has criticized organizations such as the ManKind Project® for the limited, self-selected population of men who participate. The proprietary nature of the New Warrior Training Adventure as an initiation posed limits: an external, outside observer can only theorize about the effective mechanisms of the training based on examining the protocol or other documentation, but not in situ.

Future Directions for Research

The measurement of conventional masculinity represents an important direction for future research. The current research has provided some evidence that a comprehensive approach has promise, but further measurement research is needed to validate such an approach and to develop instruments that connect measurement and theory. As it stands now, the predominant measures in the field do not relate straightforwardly to the predominant theory (O'Neil, 2008).

Future research should incorporate comparison samples in order to eliminate the alternative explanations of change and to examine how the impact of the mutual support intervention may differ across demographic subgroups. Possible comparison samples are men who participate in other types of personal growth activities, including specifically other types of activities targeted at men and masculinity. Waiting list control groups are also potentially useful, but probably only for relatively short-term comparisons. Important demographic variables to examine include age, sexual orientation, socioeconomic status, race/ethnicity, domestic partnership/marital status, and parental status.

Future research on the ManKind Project® would benefit from finding means to increase the percentage of men who participate in the research at the outset, and the percentage of men who complete measures at all data collection points. In addition, future research should study in detail participant's experience in their I-groups, including factors that are linked to positive or negative outcome of such involvement. Such research would more fully connect research on the ManKind Project[®] to the larger literature on mutual support groups.

CONCLUSION

The results of the study support both the central premise of psychology's masculine gender role strain paradigm (Pleck, 1995)—that conventional masculinity has negative effects on psychological well-being—and the central premise of the ManKind Project®—that reducing conventional masculinity has a positive effect on psychological well-being. The effect sizes of the overall changes in conventional masculinity and in psychological well-being were large, but the estimates generated by the linear growth models were small. Thus, a simple linear model is not an adequate model of the change. The effect size of the relationship between conventional masculinity and psychological well-being over time was larger, but still only small to medium in conventional classifications (Cohen, 1977), and less over time than prior to participation. Thus, the beneficence of the ManKind Project® as one community-based mutual help organization for men is supported. Further, the results are encouraging for others who may want to focus specifically on masculinity as a mechanism for improving men's well-being. However, models of the mechanisms and process of the effect will need to be further developed if an adequate understanding of the relationship is to be achieved that would helpfully guide program evaluation and development, not only for community-based mutual help organizations, but also for professionals seeking to design effective interventions.

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